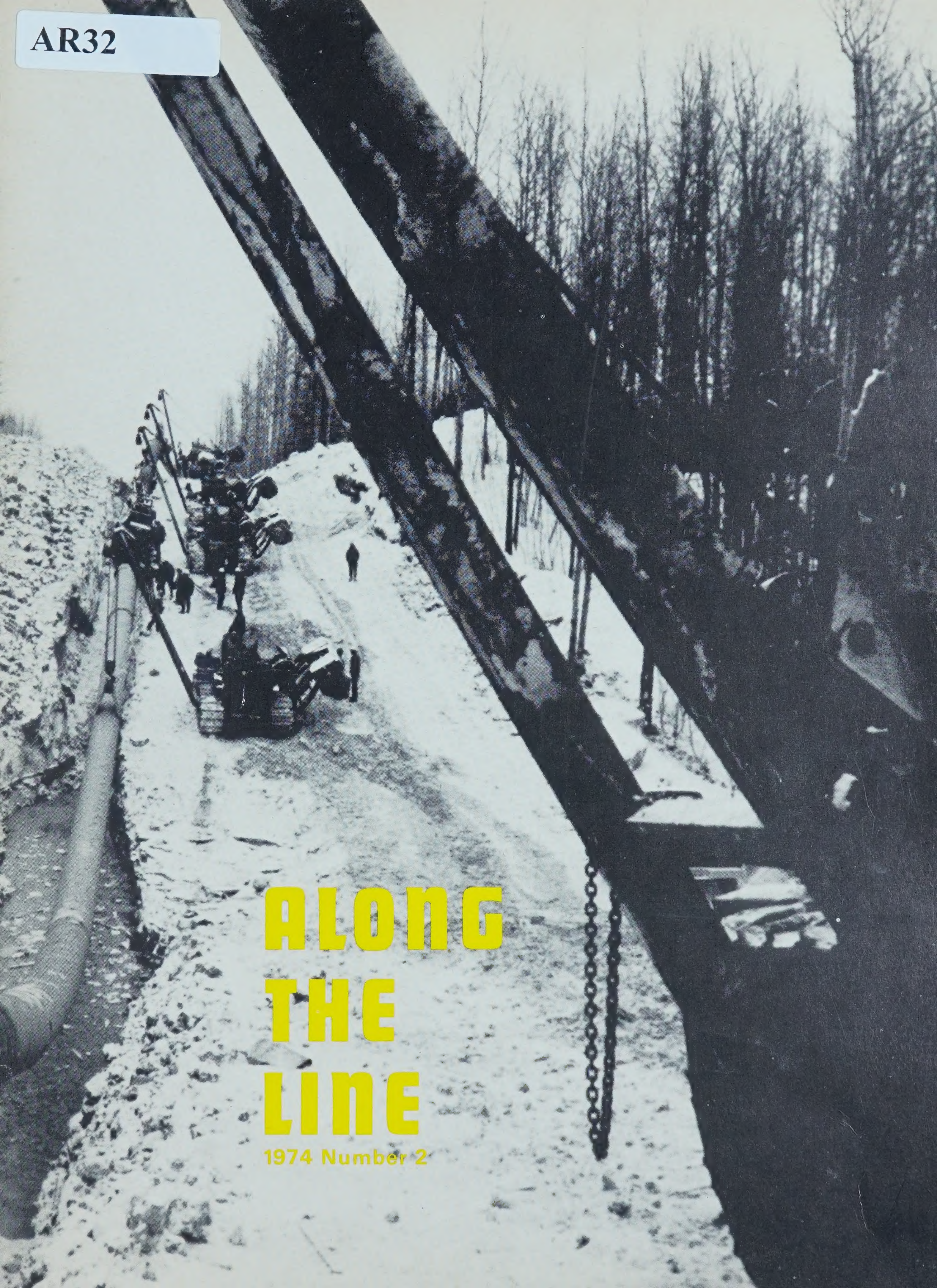

ALONG THE LINE

1974 Number 2

Line-up and preheating of pipe at a road crossing near Matheson in Northern Ontario.

ALONG THE LINE

TransCanada PipeLines

Volume 18 No. 2 1974

Published for the employees of TransCanada PipeLines and their families by the Information Services Department.

Editor: Conrad B. Tucker
Assistant Editor: Lee M. Inman

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Member
Corporate Communicators Canada

Cover –
A parade of side-boom tractors lays 36-inch diameter pipe in the ditch as TransCanada PipeLines begins its $100 million 1974 construction program near Ramore, in northern Ontario.

$100 million program for 1974

Winter construction nears completion

TransCanada's $100 million 1974 construction program includes 154 miles of 36-inch diameter pipe between Toronto and Orient Bay (north of Thunder Bay) to complete the initial looping of the original pipeline in northern Ontario.

A total of 62 miles of pipe is being installed this winter in eight sections between Ramore (north of Kirkland Lake) and Orient Bay.

Winter construction makes good sense in the swamp and muskeg terrain of northern Ontario. When the ground freezes the right-of-way becomes a natural highway for the heavy equipment required to install new pipe.

TransCanada has pioneered and perfected the techniques of 'pipelining' in sub-zero temperatures. The lengths of pipe are cleaned of snow and ice, and preheated before they are welded. Asbestos blankets are placed over the weld area afterward to slow the cooling of the welds. Most of the welders have had previous experience on TransCanada winter construction programs and they perform their demanding task at temperatures as low as −20°F.

Propane gas heaters remove moisture from the pipe before it is wrapped, to prevent corrosion, and lowered in the ditch. Tape coating is used during the winter becuase it is easier to apply in extreme cold weather then the hot dope used to coat the pipe in warmer temperatures.

The ditch is opened just ahead of the pipelaying crews to ensure the proper depth and width. High-quality sand for padding the frozen ditch must be hauled to the site by a fleet of trucks on the right-of-way. The huge side-boom tractors used to carefully lower the pipe are often kept running during the night to make sure they will be ready when the spread starts moving at dawn.

Winter hydrostatic testing procedures ensure the new sections of pipeline will be reliable and secure in service.

Daylight does not last long during the winter work days and continuous planning is needed to keep the project on schedule. Mel Backen, construction supervisor, Central Area, is responsible to W. I. Wilson, manager, Central Area, for the field operation during the current winter construction program. The chief inspector at the site is Gerry Trudeau, Central Area.

Mr. Backen and Mr. Trudeau helped supervise construction during TransCanada's first major winter program in 1971-72, known as the 'shortcut'. This 110-mile loop through virgin muskeg country north of Thunder Bay, with temperatures falling as low as −45°F. was a severe proving ground for TransCanada's construction personnel. The men who are now working in northern Ontario have developed their winter construction skills during three consecutive, major looping programs.

There are 32 TransCanada inspectors to oversee all phases of construction and testing on the current winter program. The TransCanada field office, now located at Hearst, is a mobile, communications center and meeting place for the inspectors and their assistants. However, most of the time the office is empty, except for the construction clerk who relays radio and phone messages and handles the paper work required at the site. The TransCanada inspectors can be found on the frozen right-of-way, where the new pipeline is being installed.

A 'confined spread' is a normal technique in winter construction. This means the looping operations are done in close order. However, the 1974 winter program involves shorter sections than previous programs and, as a result, there are two confined spreads which can be moving at the same time, on different sections.

The first spread includes the line-up, preheating, and welding operations, and the second spread includes the ditching, coating and wrapping, lowering-in, and backfill operations. The progress of each operation is controlled so that the two spreads move along the line in an efficient manner, in spite of the varied terrain conditions on each section.

A total of 92 miles of 36-inch diameter pipe will be installed in nine sections, mainly between Kirkland Lake and Toronto, to complete the initial looping of the original 30-inch pipeline from Winnipeg to Toronto. This phase of the current construction program is scheduled to kick-off in May.

The 1974 program also includes 2.8 miles of 30-inch pipe near North Bay, 69 miles of 24-inch pipe between Toronto and Montreal, and 17 miles of 16-inch pipe on the Ottawa extension between Morrisburg and Ottawa.

The construction between Toronto and Orient Bay is being undertaken principally by PanCana-Associated Contractors Ltd. of Calgary, and the total cost will be $50 million. The 36-inch diameter pipe for this program comes from The Steel Co. of Canada in Welland, Ontario.

The new capacity of TransCanada's gas transmission system will allow an additional 35 billion cubic feet of natural gas per year to be moved through the pipeline for eastern Canadian users.

Clearing the ditch prior to the coating and wrapping operation at Ramore in Northern Ontario.

Wrapped pipe is lowered into the ditch in sub-zero temperature at Ramore, near station 105.

Toronto Office personnel visited Station 80, Geraldton, while out viewing winter construction. Shown here are, Mel Carlson, Facilities Operation, General Foreman Gil Leslie, President George W Woods, District Manager A. B. Johnson and Vice-President, Operations, R. D. Walker.

Jack Kehler, right, Assistant to Chief Inspector, discusses a Tie-In on Section 85, west of Kapuskasing.

President George W. Woods is shown with construction crew members Gerry Trudeau, left. John MacKenzie, Val Ezerkalns and Dave Julien.

Peter Van Ooyen, TransCanada construction inspector, is shown on the right-of-way near Moonbeam, east of Kapuskasing.

Mike Saley, coating and wrapping inspector, catches breath on a cold but clear day.

Ken Penner, checks for cover during installation of pipe near Moonbeam.

Dave Taylor, is part of Mike Saley's dope inspection crew.

Toronto's Fire Academy Teaches New Techniques

Although Commerce Court West is the first high-rise office building in Canada to be equipped throughout with automatic sprinklers, Toronto office employees should feel doubly safe and secure as a result of the firefighters training program at the City of Toronto Fire Academy.

The $1.5 million complex opened in 1970, is located on 5.3 acres near the shores of Lake Ontario. The Academy provides firefighters with the assurance of developing the manifold skills needed to fight fires and carry out rescue squad operations in the modern metropolis.

A strong back, a cool head and a sturdy heart are still the basic requirements of a good firefighter. Yet they have gone far beyond that. The steady increase in high-rise apartments and office blocks, the establishment of more and more petro-chemical plants and plastics factories, the advent of the subway system with its confined space and high-voltage live rail to contend with, have made the firefighter's profession more complex, sophisticated, hazardous and demanding.

The Fire Academy, which replaced makeshift classrooms on the third floor of a district fire hall, is designed to teach them the skills they need.

Recruits take an intensive six-week course at the Toronto Fire Academy and the 1,321 men of the Toronto Fire Department go there in small groups for in-service training in new evolutions, techniques and equipment. The Academy also holds courses and examinations for promotion. Last year, for example, 207 firefighters won promotion to Captain there.

The focal point of the Academy is the 65-foot high hangar housing the Drill Hall. One wall is a three-dimensional mock-up of seven storeys of a high-rise apartment block. In it men can practice aerial ladder drills and play water from a hose turret up to 60 feet high in warmth and shelter, if not in the dry.

There is also a sprinkler room with every conceivable sprinkler system installed and a mask training room with a 'gas lock' for practical lessons in the use of self-contained breathing apparatus.

Outside in the grounds are oil pits, a railroad tank car, a hydro transformer vault, a section of subway track with the live 'third rail' and a virtually indestructible fire training house of concrete brick and steel plate for practice in extinguishing house fires of every kind.

This school is the largest of its kind in Canada and hosts foreign observers.

Firefighter wearing an "approach suit" of aluminized asbestos at a petroleum fire.

Practising the use of a life line prepares firefighters for high-rise emergencies.

Recruits learn to use cutting torches carried in rescue squad trucks.

Aerial ladder drill 60 feet up in the Drill Hall of the Fire Academy.

A strong back, a cool head and a sturdy heart are basic requirements.

Firefighter on an aerial ladder using a high pressure hose.

CROSS COUNTRY COMMENT

Correspondents

Calgary – Marnie Drinnan
Burstall – Mary Kopp
Cabri – Pat Quinn
Herbert – William Harding
Caron – Cliff Squier, Doug Yates
Grenfell – Peter Zondervan
Moosomin – Dennis Tempel
Portage la Prairie – Marian Ostenfeldt
St. Boniface – Len Mendes
Falcon Lake – Gordon Elder
Kenora – Brian Hunt
Dryden – Gary Hipfner
Ignace – Barbara Neale
Upsala – Carolyn Mitchell
Thunder Bay – Phil Emms
Nipigon – Genny Whatley
Geraldton – Bryce Simes
Hearst – Anna Vanderlip
Mattice – Ronald Begin
Smooth Rock Falls – Robert Tremblay
Ramore – Barbara Cameron
Haileybury – Doreen Lacharity
North Bay – Joseph Williams
Bracebridge – Paul Sprunt
Maple – Dave Cann
Ancaster – Terry Noble
Cobourg – George Crumback
Kingston – Gerry Huurman
Candiac – Jim Fradette

Falcon Lake

Mabel Wall, wife of Bob Wall, Toronto Office, dances with Eldon Leopky, Manitoba Hydro, at the Falcon Lake party.

Bob Wall, vice-president, Finance, and his wife, Mabel, joined Christmas celebrations at Falcon Lake. Mr. Wall, at the left, is greeted by Doug Johnston, general foreman, Station 45.

Jack Salmon, Falcon Lake Mainliner Club president, talks with party guest, Bob Partridge, at the right.

Moosomin

Mike Petrow, manager, District 58, and his wife, Mary, display their farewell gift from the Moosomin Mainliner Club. Mike and Mary moved from Moosomin to Ignace last year.

Orest and Lucille Nawrocki received farewell gifts from the Moosomin Mainliner Club before their recent move to District 142, Kingston.

Moosomin

Harvey and Sheila McGonigal received this parting gift from the Moosomin Mainliner Club before their recent move to Caron, District 13.

Seated from the left during the 15th Anniversary party at Station 25 are: Betty Anne Matheson, Sid LaSage, district manager, and his wife, Lil; and Sargeant J. Lounsbury, RCMP.

Jack Lemoine, Moosomin Mainliner Club president, is shown at the left during presentation of an engraved platter to Jean and Robert McGonigal to celebrate their wedding anniversary.

North Bay

The hockey teams of Station 116, North Bay, and Station 123, Bracebridge, resumed their friendly rivalry this winter. The teams played three games and Bracebridge took the series two games to one.

* * *

The Mainliner Club Christmas parties were a great success. Station 116 personnel and their guests enjoyed a buffet dinner and dance at the Voyager Motor Hotel. The party for children was highlighted by a return visit of Miss Liz Trulove and her puppet show. Santa Claus presented gifts to the children.

Bob and Donna McClure, and Monique Champagne, enjoyed the dance.

Geraldton

The Station 80 personnel recently welcomed Don and Evelyn Boak to Geraldton. Don previously worked at Station 34, Portage la Prairie.

* * *

The Geraldton personnel also welcomed Albert and Lynda Duff and their four children. They arrived recently from Station 45, Falcon Lake.

* * *

Gil and Doreen Leslie and their family visited friends while attending the Smooth Rock Falls Winter Carnival.

Santa greets his admirers at the Station 116 party for children.

Rita Brousseau, Marg and Harry Bruneau share a table at the Christmas party.

Liz Trulove and her puppets are surrounded by a group of happy children.

Kingston

Jane and John Kingston, Utility, and Mr. Demille, chart changer, and his wife, enjoyed the Kingston Christmas dinner and dance.

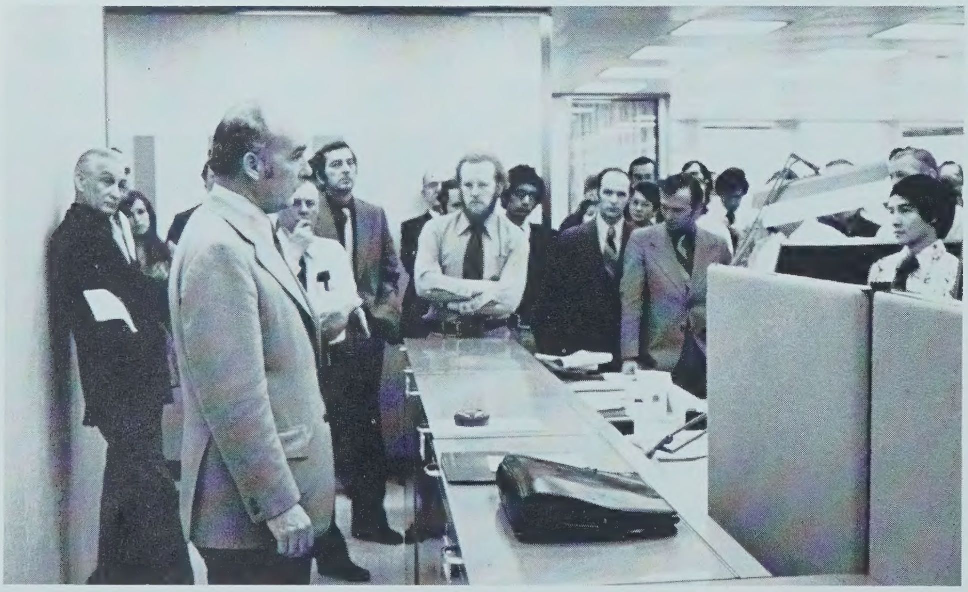
Mrs. Bob Kardash, Louis Lessard, general foreman, and his wife, and Bob Kardash, technician, at the Station 142 celebration.

Barbara Janiszewska, Gerry Huurman, correspondent for Along The Line, and Judy Peck during the dance at the Commodore Motor Hotel, Kingston.

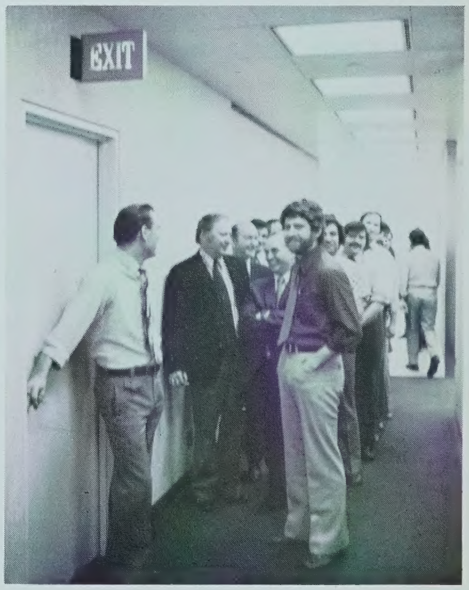
Clyde Stookey, manager, District 142, and his wife, Marie, share a table with Art Thompson, Utility, and his wife, Patricia.

Toronto

Emergency Measures



A member of Commerce Court's Security and Safety Department, foreground, briefs employees on the 53rd floor on procedures to be followed in the event of an emergency. Although Commerce Court is probably the safest office complex in North America, emergency procedures are posted on each floor of Toronto office.



In an emergency, alarm bells ring, and employees proceed to the nearest stairwell door and line up in twos. Here, deputy 53rd floor warden Len Knox, left, is ready to pass on any necessary instructions to employees.

An Easter Memory

As William Harding went to work at Station 9, Herbert, Saskatchewan, on Easter Sunday, April 22, 1973, a series of "thoughts" occurred to him which he later submitted in print to Along The Line. As another Easter season approaches, employees might like to share in Mr. Harding's reflections. Mr. Harding is the Along The Line correspondent for Station 9.

Easter, 1973, will be long remembered outside the world of Christendom. Easter, 1973, will be remembered as the latest, by calendar date (April 22), during the past 20 years. Only one Easter since 1951 has occurred in April, and that occurred in 1962.

Easter, 1973, was the time mallard ducks were stranded on frozen water holes and could not fly further north to their traditional breeding grounds, due to inclement weather. It will be remembered by fashionable people who could not gaily parade their new finery. Parkas and snowmobile suits were not very fashionable but they were more appropriate.

Easter, 1973, will be remembered by residents of this community who could not view the Stanley Cup semifinals, or the Tommy Banks Show, or the Flip Wilson Show because their television antennas and masts were damaged by freezing wind and rain. It will be remembered as the weekend when our National Flag at Station 9 was torn to shreds on a careening flagpole. And we raised a new flag when the storm passed and the weekend was over.

Easter, 1973, will be remembered by the hydro repairmen who were called out early on the morning of Good Friday to restore service to families who spent the weekend together at home, and to farmers who needed power to operate automatic milking and feeding machines. The repairmen worked all that day, all day Saturday, and into the small hours of Easter morning. They did not have much time with their children and wives in the warmth of their homes. The hydro men could have been among the first worshipers to attend the sunrise service, east of town, except they fell into an exhausted sleep when their duties were finished.

Easter, 1973, will be remembered by the Station 9 attendant who coped with the noise and smell of an auxiliary unit which was needed to keep his station operating. Families who live east of Herbert needed natural gas to help prepare Sunday dinners, and to provide evening comfort around the television set. Industries east of Herbert needed energy to start-up early Monday morning.

Easter, 1973, will be remembered by the travellers who could not 'get through' because of poor visibility, hazardous road conditions, and serious traffic accidents. Weekends with friends and loved ones, planned for many weeks, were postponed indefinitely, some forever. Sorrow, which was not planned, replaced the joys of reunions.

Easter, 1973, will indeed be remembered, by this community, for its adverse weather conditions and trials. This memory, however, will fade into the past and join other memories, good and bad. The coming summer may bring lush crops of grain, fruit and vegetables, due in part to the heavy rains of spring. Thanksgiving celebrations may be greater this year because of a more bountiful harvest. The fine summer days and autumn mornings and evenings may be bathed in bright colors, instead of the dull brown that comes with a drought. So, let us remember that the rain falls for a reason. Let us remember that the future may be brighter. And, let us rejoice in the memory of Easter, 1973.

Supplementary Major Medical Long Term Disability

In the last issue of "Along The Line" an article appeared which explained the improvements, effective January 1, 1974, to the Company's Retirement Plan. As a further step in the Company's policy to continually upgrade and improve its Employee Benefit Program, several important modifications have been made to the Supplementary Major Medical Plan and the Long Term Disability Plan. These improvements also became effective January 1, 1974.

The Company's Supplementary Major Medical Insurance Plan was set up to provide employees and their dependents with financial protection for medical expenses not covered by any other insurance plan effective in the Company. Employees who are included in our Company's Provincial Health Insurance Groups are automatically included in the Supplementary Major Medical Insurance Plan. This plan is underwritten by The Travelers Insurance Company of Canada, Group Policy No. GA-427666.

TransCanada pays 100% of the premium cost of this insurance, as well as the full cost of administration. Coverage under this plan continues for employees who retire on the Company's Retirement Plan.

Under the terms of the recent modifications, the maximum benefits payable with respect to any one person during his or her lifetime has been increased by 200% from $5,000 to $15,000. In addition, hospital charges for semi-private accommodation will now be fully paid. The excess charges over and above standard ward rates payable by the various Provincial Hospital Plans will no longer be subject to the deductible amount and 80% co-insurance clauses.

The payment of the charges for semi-private hospital accommodation is handled in the same manner as all other Supplementary Major Medical expenses. The employee is responsible for payment to the hospital, who should supply him with an itemized account showing the dates of confinement and the daily difference between standard ward and semi-private accommodation. This should be forwarded to the Personnel Department in Toronto.

It should be noted that all other medical expenses are still subject to the deductible and co-insurance conditions. Each plan member is required to pay the first $50 (two $50 deductibles per family maximum) of eligible medical expenses incurred which are not covered by the Provincial Health Plans. The Supplementary Major Medical Insurance Plan will then pay 80% of all additional expenses.

Remember, all claims relating to this plan should be forwarded to the Personnel Department in Toronto for processing.

The second plan affected by the recent modifications is Long Term Disability Insurance. Basically, this insurance plan provides all employees with a source of income in the event of prolonged periods of disability caused by either illness or accident. By definition, an employee is considered disabled when he cannot perform any of his regular duties and is not working in any other capacity. The Company pays the full cost of the insurance premiums.

The improvements effective January 1, 1974, allow for a larger monthly indemnity payable in the event of a long term disability. An employee may now receive monthly payments equal to 66⅔% of his basic monthly salary at the time he became disabled, reduced by all other disability income and up to a maximum of $2,500.

Further details on these improvements and the entire Benefit Program can be obtained by examining the Company handbook "Your Career With TransCanada Pipelines". If you have any questions please contact the Personnel Department.

The Canada Safety Council sponsors Child Safety Week May 1 - 7 to focus attention on the need to protect the lives and health of Canada's greatest asset — our children.

Every year in Canada, nearly 2,000 children under the age of fifteen are killed and almost half a million more are injured by accidents — accidents that should never have happened because they could have been prevented. In fact, more children's lives are lost as the result of accidents than from the major childhood diseases combined.

In today's increasingly complex world, learning how to cope safely is an important part of a child's education. It is our responsibility as adults to teach children, within their physical and mental capabilities, how to deal with the hazards of modern society.

We can do this by setting a good example — by adopting an attitude towards safety in everything we do that can be instilled in youngsters at an early age. Such an attitude will remain with them and help protect them throughout their lives.

Here are a few things to be kept in mind, not only during Child Safety Week, but throughout the year. Remember, children depend on YOU as an adult to be teacher and guide in the ways of safety.

TRAFFIC

Traffic accidents are the major cause of death and injury to children. Teach youngsters to cross streets only at intersections, and to play games away from traffic. Don't let children ride bicycles on public roads until they know and understand the traffic regulations. When driving, see that children always use seat belts or approved child restraints.

BURNS

Never leave children unattended. Fires start and spread very rapidly and can often make rescue impossible in a surprisingly short time. Keep matches and lighters out of reach of young children.

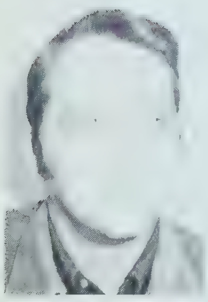
Five Year Awards

Salute to SERVICE

M. R. Heider
Sales
Toronto
February 1

L. R. McAuley
Operations
Grenfell
February 1

Ed Parkman
Operations
Mattice
February 16



W. E. Soini
Operations
Upsala
February 16

C. L. Horne
Operations
Upsala
March 16

A. C. Ottoson
Operations
Upsala
March 16

G. W. Elder
Operations
Falcon Lake
March 16

J. Najnar
Engineering
Toronto
March 25

Mrs. D. Johnson
Purchasing
Toronto
March 31

WHO'S ? WHAT..... AND ? WHERE

HELLO TO:

Baqui, A., Compressor Design (Engineering), Toronto, February 25
Chandler, R. J., Polor Gas, Toronto, February 16
Clark, D. G., Manager Administration, Polar Gas, Toronto, February 1

Gandy, Patricia, Stenographer, Operations-Compressor, Toronto, March 11

Higgins, John, Michael, Maintenance, Ignace, March 16

McDonald, James, Sutherland, Engineering-Compressor Design, Toronto, March 16
Mercer, L., Measurement Machine Operator, Operations-PipeLine, Toronto, February 4

Ashton, C. M. (Mrs.), Personnel, Toronto
Briggs, F. (Miss), Information Services, Toronto
Nicholson, B. R., Engineering, Toronto
Probizanski, I. V., Operations, Ignace
Stock, W. L., Sales, Toronto
Thomas, D. (Mrs.), Engineering, Toronto
Whidden, G. W., Sales, Toronto
Zondervan, E., Operations, Toronto

Arnam, M., from Maintenance to Utility, Operations, Thunder Bay
Barefoot, D. W., from Senior Accountant to Accounting Analyst, Accounting, Toronto
Bazely, N., from Engineer to Senior Engineer, Operations, Toronto
Callin, H. I., from Maintenance, Operations, Grenfell to Technician, Gas Supply, Calgary
Crerar, J. R., from Maintenance to Utility, Operations, Ignace
Dzatko, J. P., from Technician to Senior Technician, Operations Pipeline, Toronto.
Eirikson, E., from Senior Inspector, Field Construction, Western Area to Construction Supervisor, Field Construction, Eastern Area
Hardie, R. A., from Senior Accountant to Accounting Analyst, Accounting, Toronto
Hudson, W. A., from Senior Accountant to Accounting Analyst, Gas Supply, Calgary
Hust, D., from Foreman, Operations, Falcon Lake, to Foreman, Operations, Candiac
Huurman, G., from Maintenance to Utility, Operations, Kingston
Mackenzie, J. D., from Senior Accountant to Accounting Analyst, Gas Supply, Calgary
Martell, J. P., from Maintenance to Utility, Operations, Kenora
O'Neill, R. R., from Clerk, Accounting, to Senior Clerk, Treasury Budgets & Forecasts, Toronto
Osztian, B. F., from Accountant to Senior Accountant, Gas Supply, Calgary
Quinton, L., from Inspector, Field Construction, Eastern Area, to Technician, Operations, Cobourg
Raby, P. J., from Assistant Dispatcher to Dispatcher, Operations Gas Control, Toronto
Shortreed, F., from Accounting Analyst, Accounting, to Supervisor, Accounting, Polar Gas Project, Toronto
St. Martin, P. J., from Maintenance, Operations, Hearst, to Junior Right-of-Way Agent Corporate Secretarial & R/W., Toronto
Taylor, W. D., from Maintenance to Utility, Operations, Bracebridge
Vellesoo, E. V., from Senior Draftsman to Drafting Checker, Engineering, Toronto
Walker, J. G., from Engineer, Engineering & Operations, Administration, to Engineer, Polar Gas Project, Toronto
Warpula, K., from Maintenance to Utility, Operations, Thunder Bay
Williams, W. G., from Senior Accountant to Accounting Analyst, Accounting, Toronto

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Warpirea, K. J., Operations, Thunder Bay, February 16

Glendinning, H. C., Purchasing, Toronto, Boy, James Howard, February 28
Nichol, B. W., Operations, Portage La Prairie, Boy, Darryl Wayne, February 18
Ortt, Richard, Operations, Grenfell, Girl, Nicole Carl, December 25
Tso, Peter, Facilities Planning (Engineering), Toronto, Girl, Lynda Mai Ping, February 21

Along the Line regrets to inform employees of the death of S. C. Beckstead, 41, foreman of Station 55, Dryden.

Mr. Beckstead joined TransCanada's Operations Department in March, 1959 at Station 68, Thunder Bay, Ontario. He had previously worked for the company as a land agent.

Sympathy is extended to his daughter Ruth, 17, and family.

S. C. Beckstead

Credit Union Corner

	1973	1972
Membership end of January	829	802
Invested in Share Accounts	$700,806.79	$617,902.78
Invested in Deposit Certificates	$ 47,500.00	$ 65,000.50
Loans Outstanding	$787,794.61	$666,969.23
Surplus	$ 24,182.00	$ 19,465.00
Plus Reserve for Deposit Certificates	$ 3,071.00	$ 3,409.00
Assets	$862,830.13	$790,225.38
Loans Granted Since Inception	$4,136,825.37	

Introducing Joe Halloran New Credit Union Treasurer-Manager

TransCanada's new Credit Union treasurer-manager is P. J. "Joe" Halloran, replacing Bert Orwell, who retired at the end of December.

Born in Oshawa, Ontario, Mr. Halloran comes to TransCanada after 28 years with the Canadian Post Office. He is treasurer of his church's Credit Union, a post he has held for the past eight years.

Mr. Halloran and his wife, Patricia, have five children—twin boys and three girls—ranging in ages from 18 to 27.

Golf is Mr. Halloran's favorite hobby and he spends most weekends and vacations at the family cottage in Ontario's Haliburton region.

ALONG THE LINE

1975 Number 3

BLUENOSE II VISITS TORONTO

The Bluenose II sailed into Toronto harbor in early June for a four-day visit and was an instant hit. Thousands of Torontonians lined up for the rare opportunity to explore this duplicate of Canada's famous sailing vessel.

Built in Lunenburg, Nova Scotia in 1921, the original Bluenose brought the International Fisherman's Cup back to Canada in the first series she sailed. She did not relinquish it in her 20-year racing career. As a tribute to her sailing feats, her image has graced Canada's dime for many years and has become as familiar a symbol of Canada as the maple leaf.

In spite of valiant efforts by her famous skipper, Captain Angus Walters, to keep her in Canada, the schooner Bluenose was sold as a freighter sailing in the West Indies. She foundered on a Haitian reef in 1946, still the fastest fishing schooner on the seas—a fine tribute to the Nova Scotia craftsmen who built her and the men who sailed her.

After her visit to Toronto, Bluenose II sailed back down the St. Lawrence for home in Halifax. Her permanent berth is at Privateers' Wharf located in Historic Properties Ltd., a re-development on the Halifax waterfront.

THE BLUENOSE II

After several fruitless attempts by Captain Angus Walters and the town of Lunenburg to generate interest in building a duplicate of the famous sailing vessel, a Nova Scotia firm undertook the task.

Commerce Court West, location of Trans-Canada's Toronto office, lies between the fore topmast and the main topmast of the Bluenose II.

On July 23, 1963, the Bluenose II, an exact replica of the schooner Bluenose, was launched from the Lunenburg shipyard of Smith & Rhuland. The Bluenose II was built from the same plans as her predecessor, in the same yards and by many of the same men.

She is identical to the original Bluenose in all details of hull, rigging and sail plan. But no attempt was made to duplicate the old racer-fisherman below decks. Whereas the Bluenose's cargo was fish, the Bluenose II carries people. She is fully equipped with modern navigational aids to ensure her safety and that of her passengers, and carries a crew of 14 compared to the Bluenose's 29.

Since the day she sailed out of Lunenburg on her maiden voyage on January 12, 1964, the Bluenose II has proved a worthy successor to her namesake. Two days out of Nova Scotia on her maiden voyage to the West Indies, she fought for her life in winds of 80 to 100 mph, gusting to 120. Captain Angus Walters, on board for the inaugural run, compared the storm to the worst he had ever experienced. The Bluenose II weathered the storm and has endured many others since.

Invariably, the speed of the Bluenose II is compared to the original Bluenose, but Bluenose II does not race. There is no wish to tamper with the fame and laurels won by the famous racing schooner. However, racing yachts in the West Indies have been known to alter course to test her speed. Bluenose II has left them all in her wake. It is known that she has logged 18 knots for 1½ hours with all sails set in a 55 mph wind.

The Bluenose II was transferred to the province of Nova Scotia for $1 in 1971. As the official host ship at Expo '67, she became as well known across Canada as her predecessor and is as worthy of her fame.

ALONG THE LINE

TransCanada PipeLines

Volume 19 No. 3 1975

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Front Cover

Sailing into Toronto harbor, the Bluenose II (front cover) is a sight to 'warm the cockles' of any landlubber's heart. See story on Bluenose above. On the back cover, a helicopter's view of the CN Tower and Toronto's downtown area taken by *Along The Line's* editor on March 31. The tower measures 1,815 feet, five inches, the tallest free-standing structure in the world.

Kerr Tells Financial Analysts –

Tax Concessions For New Gas Would Stimulate Exploration

Addressing the Toronto Society of Financial Analysts at the Royal York Hotel on April 21, James W. Kerr, chairman and chief executive officer of TransCanada, outlined the Canadian energy supply and demand balance as it pertains to the operations of TransCanada PipeLines.

"As a nation we are indeed fortunate that because of the large potential gas reserves in the Mackenzie River Delta, the Arctic Islands, and other frontier areas, we have a potentially encouraging long-range gas supply situation. However, there is no justification for similar optimism for the short-term period to the 1980's when gas will be available from these frontier areas," Mr. Kerr said.

"TransCanada is, of course, actively continuing efforts to purchase additional gas in the traditional areas. We will make very possible effort to obtain the gas supply necessary to meet current sales levels. For example, during the last year we purchased just about two trillion cubic feet of new gas in Alberta under highly competitive conditions. It must be recognized, however, that the deliverability of many of TransCanada's older gas fields is declining and that it will be necessary for TransCanada to purchase—and place on stream—large volumes of gas if we are to maintain the existing sales levels. We believe it will be necessary for TransCanada to purchase essentially all gas which is likely to be found surplus to Alberta's needs, to allow us to maintain the present level of sales.

"We believe that we will be successful in meeting our contractual obligations during the current year and we believe we will also meet our obligations during the 1975/76 contract year. We can make the statement based on assurances which we have received from Alberta and Southern Gas Company that they will be able to make gas available to us during the 1975/76 contract year. However, as I indicated, if we are to maintain existing levels of sales beyond 1976, we must purchase additional gas from new and existing Alberta fields and from such sources as Alberta and Southern and Pan-Alberta Gas Limited.

"Our assessment of the gas supply situation has forced us to take the position that we will not enter into new gas transportation contracts for others. This policy will remain until we have sufficient gas under contract to ensure our ability to meet our contractual obligations for a reasonable period in the future.

"It is absolutely imperative that our Governments recreate a political and economic climate which will encourage the exploration and development of natural gas in Canada. We feel there are several steps which can be taken now, both to encourage the maintenance and deliverability from existing fields, and to encourage exploration for new reserves in traditional areas.

First, we recommend existing tax legislation be amended to allow producers to write off for income tax purposes in the year incurred, the costs of drilling development or infill wells and the cost of installation of compression facilities. This would provide some incentive for gas producers to maintain deliverability from existing fields.

"Secondly, to make western Canada more competitve with other parts of the world in the allocation of exploration funds, we recommend that higher net back prices be allowed to producers for new gas than for old gas. The Alberta Government recognized the advantages of distinguishing between new and old gas when it established lower royalties for new gas. Perhaps the Federal Government could consider making similar tax concessions with respect to new gas. This would stimulate exploration for new gas by offering producers a higher reward."

Company Chairman James W. Kerr, addressing the Toronto Society of Financial Analysts.

Weir Appointed Conservation Member

John G. C. Weir, vice-president, Corporate Services, outside the modern headquarters of the Metro Conservation Authority.

TransCanada's Vice-President, Corporate Services, John G. C. Weir, was recently honored by being re-appointed by the Metropolitan Toronto Council for a two-year term as a member of the Metropolitan Toronto and Region Conservation Authority.

TransCanada is one of many industrial and commercial firms that give financial support to the most worthy work of the Conservation Authority.

The Metropolitan Toronto and Region Conservation Authority was established early in 1957 to develop a program for the conservation of the renewable natural resources of some 1,000 square miles of the watersheds in and adjacent to Metropolitan Toronto.

This Authority has undertaken a program of Flood Control, the acquisition and development of Conservation Areas and the conservation of forests, soil and wildlife.

A complete Flood Control and Water Conservation Plan has been adopted and is designed to prevent a recurrence of the devastation of floods such as experienced at the time of Hurricane Hazel. The Plan includes construction of 13 control dams, channel improvements and acquisition of 7,200 acres of flood plain land during the next 10 years, at an estimated cost of $40,000,000 with financial assistance from the provincial and federal governments. The major portion was approved in the spring of 1961.

Six thousand acres of conservation land have been acquired and are being developed as recreational areas for the 2,000,000 people of the region. Annual visitation to the Authority's 12 Conservation Areas is now well over 1,000,000 persons.

The Wildlife Program encourages proper fish and wildlife management.

Certain historic sites have been marked. Black Creek Pioneer Village, containing 20 restored buildings has been developed to depict life in the region prior to 1867.

Hulse Chairs Marketing Meeting

Co-Chairman at this year's Marketing Conference of the Canadian Gas Associations's Utility/Manufacturers' section was B. E. Hulse, TransCanada's manager, Sales Contracts.

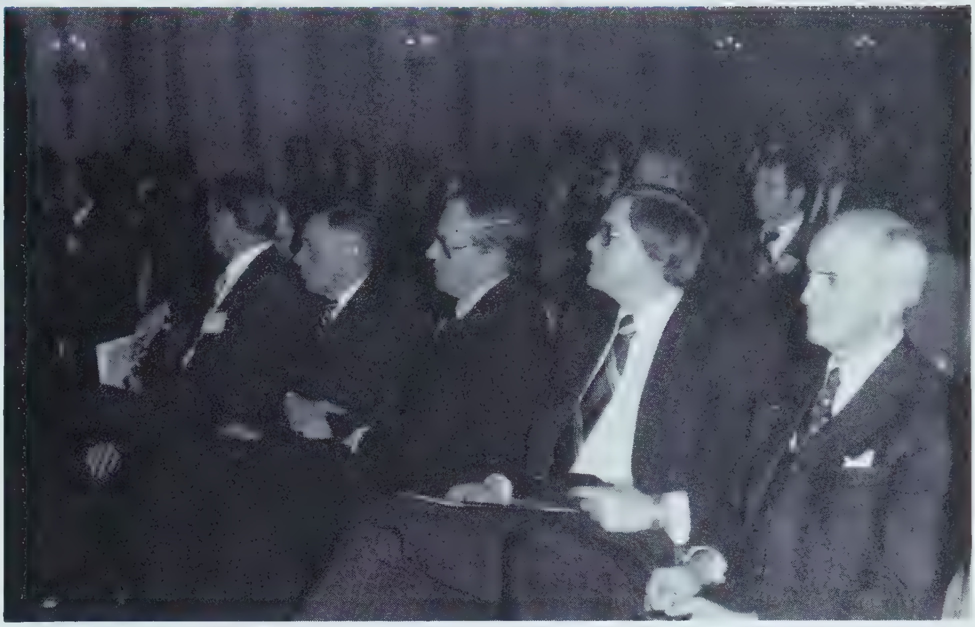
Theme of the conference was "That's No Activist—That's A Customer!" Among the many topics covered by the speakers were: Consumer Related Government Legislation, Positive Aspects in Consumerism and Energy and the Gas Industry.

Welcoming remarks to delegates were given by James W. Kerr, company Chairman and Chief Executive Officer.

B. E. Hulse, left, manager, Sales Contracts, presents gift to speaker Norman A. Cafik, M.P., Parliamentary Secretary to the Minister of Consumer and Corporate Affairs.

Dividend Rate Doubles In Past Year

In his April 2 address to shareholders at the company's Annual Meeting held in Calgary, James W. Kerr, Chairman and Chief Executive Officer, said that company directors regularly review the ability of the company to pay dividends. Mr. Kerr said that it was indeed a pleasure to be able to announce that, at the meeting of the Board of Directors that morning, the annual rate of dividend was again increased 20% from 60¢ to 72¢ per share, and this increased dividend rate will be applicable to the second quarter of this year, 1975. This increased dividend will be payable July 31 to shareholders of record June 30, 1975. In effect, this means that the annual dividend rate on TransCanada common shares has more than doubled in the past year.



TransCanada's Annual Meeting was held this year at the Palliser Hotel in Calgary, Alberta.

Comic Book Available On Gas Industry

Natural Gas At Work, a new comic book for school children explaining the Canadian natural gas industry, is being made available to TransCanada employees with the current issue of *Along The Line*.

The booklet was the creation of the Public Relations Committee of the Canadian Gas Association. The artist was Bill Reid of Oshawa, Ontario.

The comic book will become part of the school information kit available from the TransCanada Information Services department and additional copies are available by writing the department in Toronto or Calgary. Ce livre de bandes dessinées est également disponible en français.

FACTS PAMPHLET

Also enclosed with this issue of *Along The Line* is a copy of the pamphlet "Facts About The Company And Its Operations", dated April, 1975.

TRANSCANADA TO INVEST $200 MILLION IN ARCTIC GAS

"TransCanada PipeLines has agreed to invest $200 million in the common shares of Canadian Arctic Gas Pipeline Limited," James W. Kerr, Chairman and Chief Executive Officer, announced recently. This commitment to participate in the equity financing of the proposed Mackenzie Valley natural gas pipeline is the largest yet announced. The CAGPL project is designed to transport Alaskan and Canadian natural gas to the TransCanada system and to points on the southern border of Canada.

This initial investment by TransCanada in Canadian Arctic Gas, which will be made over a period of approximately five years, could increase to $272 million if the actual cost of completing the proposed pipeline exceeds the present estimate.

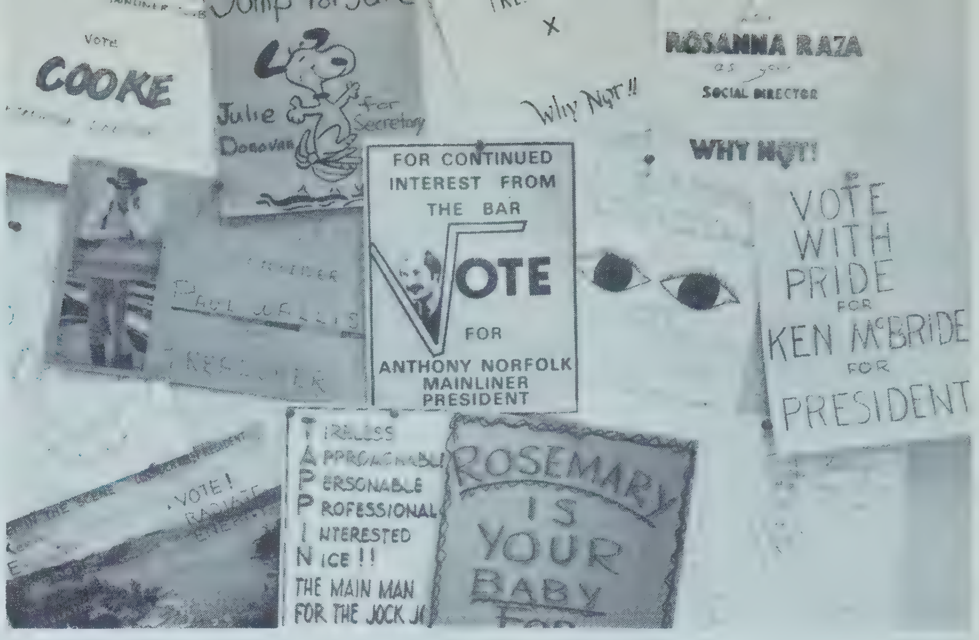
This proposed equity investment by TransCanada is contingent on approvals by all appropriate governments of the Canadian Arctic Gas Pipeline project, and on the completion of satisfactory financing arrangements for the project. Another basic condition of the proposed action by TransCanada is the execution of satisfactory long-term gas supply contracts from the Mackenzie Delta area for Canadian consumers.

"In addition," Mr. Kerr said, "TransCanada would need to secure satisfactory regulatory treatment of the proposed investment."

"We are making this commitment because we are convinced that Canadian Arctic Gas provides the earliest and lowest cost method of getting badly needed natural gas reserves out of the Mackenzie Delta area for Canadian markets", Mr. Kerr said.

Mr. Kerr concluded, "This significant investment in CAGPL will definitely not restrict TransCanada from supporting other pipeline projects which are designed to obtain natural gas from other frontier areas."

Mainliner Club Election Fever Gripped Toronto



Election fever gripped Toronto Mainliner Club members recently in the annual run for executive officers.

When the poles closed and 75% of the membership had voted, the results showed the following successful candidates: Ken McBride (Gas Measurement), president; Harry Patterson (Engineering/Operations), social director; Rosemary Von Uders (Office Services), recreation director; Tim Holmes (Accounting), treasurer; and Julie Donovan (IPEL), secretary. Dave Russel is immediate past-president.

The vote was close in all categories and the unsuccessful candidates deserve credit for the campaigns they waged—Anthony Norfolk and Judy Rowan who ran for president; Bill Morrison and Rosanna Raza for social director; Lloyd Cooke and Dave Tappin for recreational director; Paul Wallis for treasurer; and Kathleen Fortier and Arlene Snitman for secretary.

A question on the ballot seeking a change in the constitution which would see the election of a vice-president who would automatically assume the presidency the following term, was lost when it failed to receive the required two-thirds majority. The constitution as it now stands means that Harry Patterson, the new social director, will assume the role of vice-president during the coming year.

The full program presented for Mainliner Club members during the 1974-75 term was due to the efforts of last year's executive—Dave Russel, president; Anthony Norfolk, vice-president; Dave Jensen, treasurer; Ken McBride, social director; Phil Evans, second assistant social director; Don Peddar, recreation director; and Judy Rowan, secretary.

The activities last term included a May dance at Howard Johnson's Airport Hotel; a theatre night at the Royal Alexander Theatre; a day at the races at Woodbine Race Track; a tennis night at the C.N.E. Coliseum; a family picnic at Swiss Chalet Park; a golf tournament at Woodlands Golf and Country Club; the Lake Ontario ferryboat cruise and dance; Ice Capades at Maple Leaf Gardens; a dinner-theatre night at the Fire Hall; the annual children's and adult Christmas parties; a winter weekend at Bay Ski Village in Owen Sound; a fashion show at Commerce Hall; the D. G. Simpson Curling Bonspiel in Oakville; a hockey night to see Toronto Toros play Houston Aeros; and a barn dance at the Hayloft.

Upcoming events include a Lake Ontario cruise and dance which will take place June 26 and a golf tournament which will be held September 13 at Rolling Hills Golf and Country Club.

The 1975-76 Toronto Mainliner Club Executive, on left, includes: front row; Julie Donovan, secretary, Ken McBride, president. Back row; Tim Holmes, treasurer, Rosemary Von Uders, recreational director and Harry Patterson, social director.

At Calgary office, above, the 1975-76 Mainliner Club Executive includes: from left to right; Debbie Heap, women's sports director; Maria Donaldson, treasurer; Darlene Kalyta, secretary; Jane Schroeder, social director. Back row from left to right; Howard Mallabone, men's sports director; John McDonald, president; Beverly Reynolds, promotion and Bill Oke, vice-president.

Tom Colmer and his wife, Agnes, at a farewell luncheon where Tom gave an amusing good-bye speech.

Tom Colmer got a second chance to give a farewell speech when he recently retired from TransCanada, having previously retired from the Royal Canadian Mounted Police.

Mr. Colmer joined TransCanada in 1957 as a right-of-way agent acquiring easements and settling damage claims for the original pipeline.

In 1959, as the pipeline went into operation, Mr. Colmer was appointed safety supervisor and set up a safety program for the company. He developed and conducted the program until July, 1974, when he again joined the Right-of-Way department, with a view to continuing this type of work after retirement.

Mr. Colmer feels that TransCanada's safety program is one of the best in the country—"a really practical safety program".

"I would like to thank all the people I have worked with in the field for all the cooperation which has made the safety program work," Mr. Colmer said.

Tom Colmer and his wife, Agnes, now intend to take a holiday and play some golf—perhaps in Florida. Future plans include a trip to Hawaii. Mrs. Colmer, a nurse, intends to continue her volunteer work with autistic children.

Mr. Colmer was born in Lloydminster, Saskatchewan, where his parents were Barr Colonists. His wife was born in Cape Breton, Nova Scotia, and moved to Saskatoon as a child. The Colmers aspire to owning a cottage in Ontario and a trailer home in Florida.

Retirement Party Held For Colmer, Whytock

"I've been around and I've had good jobs and mediocre jobs—but these past 18 years have been the finest working years of my life," said Walter Whytock of Information Services Graphics section, on retiring from the company recently.

Mr. Whytock joined TransCanada in November, 1957, as a graphic artist and is well known for his paintings. He has commissions to do more paintings and pen and ink sketches, so retirement is really relative.

Walter was born in Edinburgh, Scotland, and recently purchased a house in Pittenween, 17 miles from where he was born. He and his wife, Jan, intend to divide their time between Canada and Scotland.

"I'm just as much at home here as in Scotland. There are more traditional Scottish events happening in Toronto than in Scotland," Walter observed. "We'll probably live in Scotland in the winter since there is no way we would miss the Canadian summer."

The Whytock's celebrated their 40th wedding anniversary last year in Scotland where a reception by their friends was held.

Mr. Whytock is a Canadian citizen and says he has more friends in Canada than in all of Scotland. He extends a warm welcome to anyone who would like to visit them in Scotland.

Future plans for the Whytocks include a trip to New Zealand where Mrs. Whytock's brother lives. They also intend to tour Australia.

The Whytocks wish to thank everyone for their kindness and friendship.

D. W. Brown, Manager of Information Services, offers best wishes to Jan and Walter Whytock at a retirement luncheon held in their honor.

PRIZE MONEY DOUBLED IN ANNUAL COMPETION!

Employees of TransCanada PipeLines are invited to enter the Annual Photo Contest. The deadline for entries is Tuesday, September 30.

A cash prize of $50 will be awarded for the best entry in each of the four categories. Runner-up prizes of $20 will be awarded in each category. An additional $20 will be awarded for the 'best-in-the-show.'

Categories

1. Children
2. Scenery, Plants and Still Life
3. Where I Live: Photographs taken within your own city, town or area. Any photographs which you feel portray the character or mood of your area.
4. Miscellaneous

Color and Black and White

*This year, all categories apply for both black and white pictures and color prints or transparencies.

Contest Rules

A. You may enter a maximum of four photographs, but no more than two in a single category.

B. Each photo entered must have been taken by the employee who submits it, during the past year.

C. Transparencies should be either 35mm or 2¼ x 2¼ and must be mounted.
Black and white prints should be 5 x 7 or larger.

D. A category will NOT be judged unless it contains entries from at least three employees.

E. No contestant may win in more than one of the four categories.

F. Print your name and address plus the category on the back of each print or on the frame of each slide. (On glass-mounted slides, use a small label.)

G. Address your entries to: Along The Line Photo Contest
TransCanada PipeLines
P.O. Box 54, Commerce Court West
Toronto, Ontario, M5L 1C2

Package your entries securely and mark 'Photos—Do Not Bend' plainly on the outside of the envelope. Contest deadline is Tuesday, September 30.

Entry Deadline - September 30th.

Kenyan Pipeliners Visit Gas Control

Three pipeline engineers from Kenya in East Africa recently visited TransCanada's Gas Control Centre at Toronto Office accompanied by George Hugh, manager, Engineering and Operations Compression (second from left in this photograph) and representatives of Toronto's York University where the visiting Kenyans are taking environmental courses under sponsorship of the Canadian International Development Association.

Tom Kalyn, senior gas controller, explained how TransCanada's on line process control computer assists the gas controllers in controlling the transportation of approximately three billion cubic feet of natural gas a day from the gas producing areas of Alberta to TransCanada's natural gas distribution customers who in turn serve homes, businesses and industries.

George Hugh, manager, Engineering and Operations Compression, second from left, discusses TransCanada's Gas Control Centre with Kenyan engineers.

IGU Transmission Committee

Canada and the United States recently hosted a meeting of the International Gas Union's Transmission Committee in Toronto. The International Gas Union is comprised of 32 nations, includes all the major gas producing and using countries of the world, and is the world representative body of the gas industry dealing with technical developments. Attending the Transmission Committee meeting were representatives of Canada, United Kingdom, West Germany, Sweden, Italy, Belgium, Denmark, Holland, Russia, United States and Yugoslavia. Attending from TransCanada was R. D. Walker, far left, vice-president, Engineering and Operations. Attending from Michigan Wisconsin Pipe Line Company was Executive Vice-President James J. Trebilcott, second from right.

Students Tour Station 2, Burstall, Sask.

Thirty Southern Alberta Institute of Technology students toured TransCanada's Station 2, Burstall, Saskatchewan in early May.

The tour took the SAIT power engineering students and instructor Jim Syme to the Pacific Petroleums extraction plant in the morning and on to TransCanada's compressor station in the afternoon.

Bill Bates and Peter Dufresne of TransCanada started with an initial briefing of the plant and proceeded to conduct the more than two-hour tour.

Interest was high with questioning centered around the operation of turbines versus that of the RB 211. Upon their departure, all students were presented with information Kits outlining TransCanada's operations across Canada.

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Businessi
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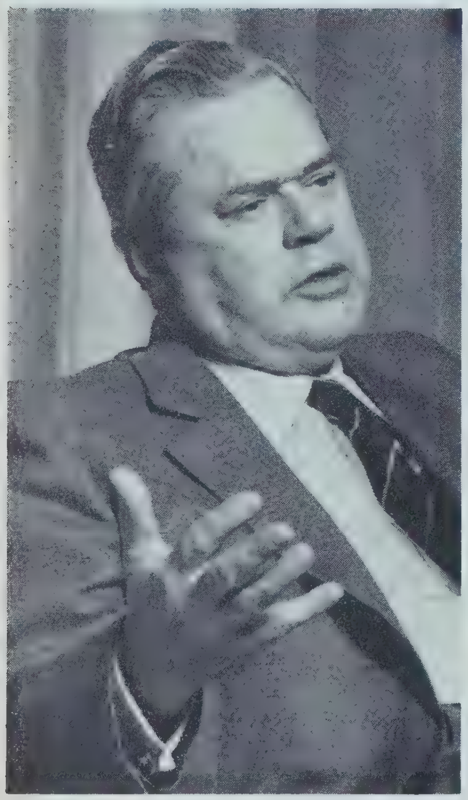
J. W. Ke

To help business tell its story in this time of criticism and misconception, a series of interviews between freelance writer Dean Walker and the Chief Executives of major corporations has been arranged by The Investors Group, whose associated companies are shareholders in a large number of Canadian corporations. We believe this series will surprise and enlighten every Canadian.

The questions and answers have been edited, but a more complete version of this interview, and others in the series, is available by mailing the coupon below. In this interview, Dean Walker talks with J. W. Kerr, Chairman and Chief Executive Officer, TransCanada PipeLines.



Our company has even less freedom than government owned businesses.

Walker: As head of such a huge corporation, you surely have political power?

Kerr: Not really. Of course, part of our job is to try to cultivate good relations with key provincial and federal government people. But the opportunity for businessmen to influence government decisions these days is not as great as it may have been in the past.

A few years ago, cabinet ministers often sought advice from the business community. They still do, but now they have more expertise within their departments.

It's a myth that the seat of power exists in the corporate boardroom. It's the political people who quite rightly have power, a tremendous amount of it.

Walker: But you have other sorts of power. Your pipeline is a monopoly carrying an essential product. That must mean you can set any price you want.

Kerr: It doesn't mean that at all. As a matter of fact, our company has less freedom to set prices than most businesses, even less freedom than government owned businesses. The facilities we construct, the amount of capital we invest, our rate schedules, and the rate of return we are permitted to make, all must be approved by the National Energy Board. For example, at the present time, we are allowed to earn 9.8 percent on our utility rate base. In actual practice, up to the present time, we've never been able to catch up, and actually have earned less than the amount we're permitted to earn.

Walker: Nevertheless, power emanates from the sheer volume of your activities. TransCanada spends hundreds of millions of dollars every year. There's unavoidable power just in deciding how and where that will be spent.

Kerr: If so, then we use it with great care.

When TransCanada started, we couldn't buy much of what we needed here, so the Canadian content of our system was then quite low. But we always have had a definite policy of buying Canadian whenever possible, and our continuing requirements have since helped many new manufacturing facilities get established. Today, Canadian suppliers provide ninety percent of everything we need.

Walker: However, you do have power to force farmers to let you run pipelines through their lands.

Kerr: The route of our pipeline must be approved by the National Energy Board. Once it is approved, we can expropriate a right-of-way with court approval. In actual practice, we have only had to seek court orders in about thirty cases out of the 6,000 farms we cross, and in some of those cases, it was entirely friendly, because it was the only way to secure a clear title. We do our best to ensure that what we offer the landowner is fair or more than fair and, as a matter of policy, we do our very best to negotiate an agreement. We represent a national public interest, but we do our best to compensate the owner of each parcel of land we cross for loss or damage to his private interests.

Walker: What about personal power? Can you fire someone because you don't like the cut of his jib?

Kerr: I suppose I have some power in connection with the careers of employees, but whether or not I like the way a man parts his hair will have nothing to do with his success or failure around here.

As far as power outside the company is concerned, it's a myth that a chief executive has power as an individual. He only has power as a representative of a corporate

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entity and leader of a management team.

Walker: Do you have power in individual decision-making?

Kerr: I don't make many decisions all on my own. I usually consult first with senior management. Especially important decisions are referred to the board of directors.

Walker: The public might feel more confident about the power of big business if it didn't operate in such secrecy.

Kerr: Secrecy! This corporation operates in a fishbowl!

Nearly everything we do is subject to approval by government regulatory agencies, usually after public hearings where TransCanada witnesses are subjected to detailed cross examination.

Walker: You are accountable to the board of directors?

Kerr: I am chairman of the board of directors and I have to be elected by the board each year. The board, in its turn, is elected by the shareholders each year at the annual meeting. Also, shareholders representing one-tenth of the issued shares of the company can, at any time, arrange for a special general meeting to raise items of company business.

Walker: In the long run, then, it's the shareholders who have power. Who are the shareholders?

Kerr: About 22,000 Canadians. Eighty-seven percent of our share owners, holding 97 percent of our shares, live in Canada. We are proud of our very high Canadian content.

All of our managers, and all but one of our directors, are Canadian. So, if there is any power in this corporation, it's firmly in Canadian hands.

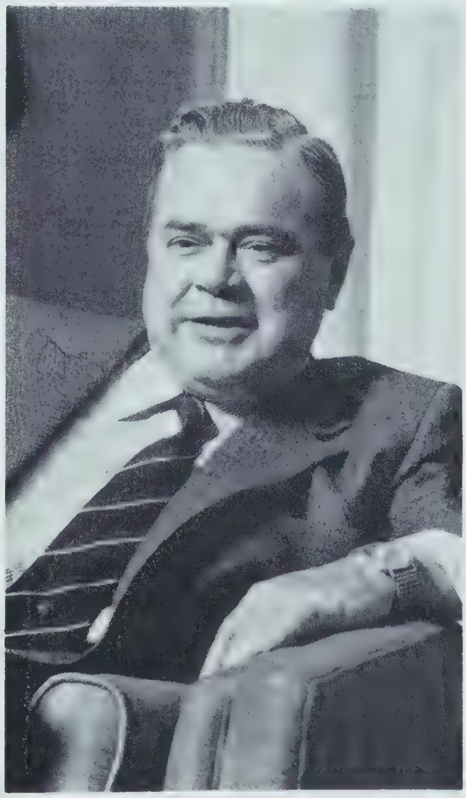
Walker: You're a special case. Other corporations work in secrecy.

Kerr: That's an exaggeration.

Take a brewery. Although it's not regulated by a National Energy Board, it is regulated by government in many other ways. It's always under the scrutiny of one department or another.

The financial affairs of every corporation have to be revealed publicly in financial statements every year. All the figures are audited by auditors elected by shareholders.

You're just plain wrong when you say business operates in secrecy.



If there is any power in this corporation, it's firmly in Canadian hands.

Walker: Big business now has the capacity to put together projects worth billions of dollars, and they have great community impact. Shouldn't government somehow monitor the use of that growing power?

Kerr: That tends to be happening anyway through government investment, which brings with it an equivalent degree of ownership and control. Ontario, Quebec and Alberta have recently formed energy companies as vehicles for government investment in large projects. Panarctic Oils is 45 percent owned by the federal government and, as would be expected, it has representatives on the board of directors.

Walker: In the future then, will anything distinguish private enterprises from public enterprises?

Kerr: Yes. Private enterprise will still be the risk taker, the pioneer in new fields, and will always be more efficient in the allocation of resources, because of the need to make a profit or return on investment. It should always be more efficient as a result.

The private enterprise efficiency of TransCanada PipeLines has contributed significantly to Canadian development. Our pipeline operates with the world's lowest investment costs per thousand cubic feet of gas throughput. That efficiency protects us and protects Canada.

As I see it, our efficient pipeline, linking western Canada's gas to eastern Canadian industry, is one of the important ties holding this country together. I can't see in that any hint of the misuse of power.

For an informative booklet on business and the free enterprise system, fill out this coupon and send it to:

The Investors Group,
280 Broadway,
Winnipeg, Manitoba R3C 3B6

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CROSS COUNTRY COMMENT

Correspondents

Calgary—Marnie Drinnan
Burstall—Lorna Schick
Cabri—Pat Quinn
Herbert—William Harding
Caron—Doug Yates
Grenfell—Peter Zondervan
Moosomin—Terry Redfern
Rapid City—Mildred Stanick
Portage la Prairie—Marian Ostenfeldt
St. Boniface—Gail Keast
Falcon Lake—Gordon Elder
Kenora—Brian Hunt
Dryden—Gary Hipfner
Ignace—Barbara Neale
Upsala—Susan McIntosh
Thunder Bay—Phil Emms
Nipigon—Eini Rathje
Geraldton—Aksel Johnson
Hearst—Anna Vanderlip
Mattice—Ronald Begin
Smooth Rock Falls—Robert Tremblay
Ramore—Barbara Cameron
Haileybury—Neil Sheppard
North Bay—Joseph Williams
Bracebridge—Paul Sprunt
Maple—Richard Sampson
Ancaster—Terry Noble
Cobourg—George Crumback
Kingston—Gerry Huurman
Candiac—Jim Fradette

Moosomin

Moosomin personnel and their wives competed in two Bonspiels this past winter. The Albert Ressler foursome won the Station 25 Local Bonspiel in January. The Terry Redfern foursome defeated tough opposition to win the District 25 Annual Bonspiel in late February. Marg Lee, wife of Rod Lee, Utility; Betty Hunt, wife of Art Hunt, technician; Lil LaSage, wife of Syd LaSage, manager, District 25; and Audrey Ewasiuk, wife of Jack Ewasiuk, Utility, won the Grand Aggregate—first and second events—at the McAuley Ladies Annual Bonspiel.

From the left, are: Audrey Ewasiuk, lead; Harvey Steffenson, second; Marg Lee, third, and Albert Ressler, skip, at Station 25 Bonspiel.

Calgary

Beverly M. Reynolds recently joined Information Services, Calgary Office, as Information Services Assistant. Miss Reynolds is a Public Relations graduate of Mount Royal College and a resident of Calgary where she has worked in business communications.

From the left, are: Terry Redfern, skip; Ron Mahnke, third; Valerie Rose, lead, and Doug Anderson, second, at the District 25 Bonspiel.

Kenora

Station 49 Mainliner Club members held their Annual Bonspiel at the Kenora Curling Club. Twenty rinks participated in three scheduled events, and all the curlers were served a fine buffet before the finals. Some of the members and their wives and guests still had the energy to enjoy a dance following the presentations to the winners. Gordon Gilbertson, technician, led his rink to victory over the foursome of Gene Culleton, district clerk, in the final of the first event. Jim Taylor, Utility, and his crew defeated the rink led by Ed Hipfner, general foreman, in the second event. A team from Ignace, led by Bert Bruvall, Utility, defeated the foursome led by Brian Hunt, Utility, in the third event.

From the left, are: Bert Bruvall, Julie Anderson, Frank Lillico, and Penny Bruvall.

From the left, are: Walter and Lois O'Neill, Terry Stevenson, and Jim Taylor.

Thunder Bay

Assistant Safety Supervisor Chuck Thompson took this photograph of the safety jacket winners at Station 68, Thunder Bay.

Kenora

From the left, are: Jack and Charlotte MacFarlane, Carol and Gord Gilbertson, at the Kenora Bonspiel.

Nipigon

Station 75 personnel and their wives held a wine and cheese party recently to welcome Eini and Bruno Rathje, foreman, who moved from Station 2, Burstall. Hostess Liz Throm, wife of Gunther Throm, subforeman, served a delicious buffet lunch at midnight.

Jennie and Ed Whatley, foreman, Geraldton, received a king-size hard hat from Nipigon personnel during their recent farewell party.

Mattice

Jim Duff, manager, District 92, presents the J. R. Duff Trophy to the winners of the A event at the Mattice Annual Curling Bonspiel. From the left, are: Rollande Tremblay, wife of Bob Tremblay, Utility, Smooth Rock Falls; Omer Viau, Maintenance, Station 92; Mrs. Gordon Lebarron, Mattice; Bob Tremblay, and Jim Duff.

North Bay

Conrad Lapierre, Gerry Dion, sub-foreman, and Frank Scott on the spoons, make some good old-time music at North Bay party.

Children from Station 116 take a break at the snowmobile party.

Ken Toal, general foreman, North Bay, presented a retirement gift to Conrad Lapierre.

Station 116 Mainliner Club members and their families held a snowmobile party at the North Bay, Yacht Club on Lake Nipissing. The weather was mild and the snow was perfect for the afternoon activities. A delicious supper was served and the guests enjoyed an evening of dancing at the club.

Conrad Lapierre, who worked at Station 112, Marten River, for about 10 years, entertained the guests during his own retirement party at Station 116. Conrad is a renowned old-time fiddle player and his retirement plans include attending numerous fiddle contests.

The personnel of Station 112 and Station 116 were proud to receive the attractive jackets awarded for their fine safety record.

Construction Supervisor Joe Polec of Eastern Area received his safety jacket award from John G. C. Weir, vice-president, Corporate Services, during presentations at Station 116, North Bay.

Haileybury

Having received their safety jackets from John G. C. Weir, vice-president, Corporate Services, this handsome group from Station 110, Haileybury, posed for the photographer.

Maple

John G. C. Weir, vice-president, Corporate Services, presents a safety jacket award to Maple's Charlie Neale.

Two years without a lost-time accident allowed Mr. Weir to present a safety jacket to Brian Drope.

Eastern Area Office

Secretary June Pidhirny of Eastern Area Office was the recipient of a safety jacket award and receives congratulations from R. D. Walker, vice-president, Engineering and Operations.

Bill Kenderdine's safety jacket receives close scrutiny from Area Engineer Ben Lancee, left, and Area Admin. Supervisor Terry Wardrobe.

Cobourg

Vice-President, Sales, N. E. Frost, left, congratulates Wally Hirst, a safety jacket recipient.

Bracebridge

A helicopter visit to Station 123, Bracebridge, gave John G. C. Weir, vice-president, Corporate Services, an opportunity to speak to the station personnel before handing out safety jacket awards.

General Foreman George Crumbach appears quite pleased with the fit of his safety jacket award.

Candiac

Dan Hust, left, waits his turn as N. E. Frost, vice-president Sales, helps Charlie Brosseau on with his safety jacket.

Mr. Frost congratulates Roma Dostie on being awarded a safety jacket at Station 802, Candiac.

Kingston

N. E. Frost, left, vice-president Sales, presents safety award jacket to Paul Hoag.

Mr. Frost checks the size of the jacket before passing it on to Kirk Kawamoto.

Upsala

Upsala Curling Club members held their annual mixed bonspiel recently. Harry Taylor, manager, District 68, at the left in this photograph, presented the TransCanada Pipelines Trophy to the winning rink, from the left: John Leganchuk, foreman, Station 62, and his wife, Corky; Dale Guyett, Ontario Provincial Police, Upsala, and his wife, Sheila.

Toronto

Kay Darg, secretary to Company President George W. Woods, recently completed 15 years of service with TransCanada. To mark the occasion, the girls bought an anniversary cake and Mr. Woods presented Kay with her 15-year pin.

Mel Carlson, right, former manager of Operations, recently resigned from TransCanada to join the staff of Canadian Arctic Gas Study Limited as Director of Operations. Mr. Carlson joined TransCanada's Engineering Department in October, 1956. At his farewell party, R. D. Walker, vice-president of Engineering and Operations, presented Mel with a set of golf clubs and a cart.

WHO'S? WHAT..... AND? WHERE

HELLO TO:

Boodoo (Mrs.), S. P., Gas Supply, Calgary
Bouley, Louis, Eng/Ops, Mattice
Bowman, R. C., Office Services, Toronto
Bryson, R. D., Gas Supply, Calgary
Buhr, R. L., Eng/Ops, Geraldton
Capobianco, Claudio, Eng/Ops, Toronto
Christiansen (Miss), R. I., Gas Supply, Calgary
Di Placido (Mrs.), Antonietta, Accounting, Toronto
Fallis (Mrs.), R. M., Treasury, Toronto
Hanna, R. M., Eng/Ops, Central Area
Hicks, L. J., Eng/Ops, Caron
Matthews (Miss), L. A., Legal, Toronto
McEvoy, D. J., Eng/Ops Administration, Toronto
McGonigal, W. G., Eng/Ops, Ramore
McLellan, G. L., Eng/Ops, Ignace
McKnight, D. J., Eng/Ops, Maple
Marrison, J. A., Maintenance, Kingston
Ottoson, E. C., Eng/Ops, Ignace
Pigeon, R. J., Eng/Ops, Ramore
Reynolds (Miss), Beverly, Information Services, Calgary
Robins, K. T., Eng/Ops, Burstall
Rosenkrands (Mrs.), S. A., Taxation & Insurance, Toronto
Ross, M. A., Rates, Toronto
Thomson (Miss), D. A., Eng/Ops Administration, Toronto
Turner (Miss), E. T., Polar Gas, Toronto
Van Rooi, M. P., Eng/Ops, Candiac
Watson, K. W., Gas Supply, Calgary

CHANGES – March

Connelly, H. J., Dispatcher to Gas Controller, Operations, Toronto.
Dulkys, E. F., Accountant to Senior Accountant, Treasury, Toronto.
Fitzpatrick, J. R., Assistant Dispatcher to Gas Controller, Operations, Toronto.
Gaw, E. A., Dispatcher to Senior Gas Controller, Operations, Toronto.
Gilbertson, G. L., Utility to Technician "M", Operations, Kenora.
Gingell, G. T., Administration Assistant to Senior Administration Assistant, Engineering and Operations Administration, Toronto.
Hamlyn, R. W., Utility to Technician "M", Operations, Kenora.
Hansen, A. T., Pilot to Senior Pilot, Aviation, Winnipeg.
Hurst, T. R., Dispatcher to Gas Controller, Operations, Toronto.
Iannone, N., Junior Accountant to Accountant, Rates, Toronto.
Kalyn, T. J., Dispatcher to Senior Gas Controller, Operations, Toronto.
Kumhyr, E. C., Welder "A" to Technician "M", Operations, Kenora.
Lebarron, G. J., Maintenance to Utility, Operations, Smooth Rock Falls.
MacLean, J. D., Dispatcher to Senior Gas Controller, Operations, Toronto.
Matt, R. E., Dispatcher to Gas Controller, Operations, Toronto.
McDonald, J. S., Engineer to Senior Engineer, Engineering, Compressor Design, Toronto.
McLaughlin, W. R., Pilot to Senior Pilot, Aviation, Malton.
Murphy, H. F., Junior Engineering Assistant, Field Construction, Eastern Area to Junior Administration Assistant, Engineering and Operations Administration, Toronto.
Raby, P. J., Dispatcher to Gas Controller, Operations, Toronto.
Reid, J. E., Captain to Senior Pilot, Aviation, Malton.
Salmon, J. D., Utility to Technician "E", Operations, Falcon Lake.
Shawera, E., Maintenance to Utility, Operations, Mattice.
Sopchyshyn, V. G., Utility to Technician "E", Operations, Ramore.
Winslow, W. H., Utility to Technician "M", Operations, Falcon Lake.

April

Anderson, M. L., Utility to Technician "E", Engineering & Operations, Thunder Bay.
Dean, L. A., Utility to Technician "M", Engineering & Operations, Thunder Bay.
Elder, G. W., Maintenance to Utility, Engineering & Operations, Falcon Lake.
Foley, E. A. (Mrs.), Senior Clerk to Junior Staff Relations Assistant, Personnel, Toronto.
Hart, E. M. (Mrs.), Measurement Machine Operator to Senior Measurement Machine Operator, Engineering & Operations, Toronto.
Hunter, D. E. (Mrs.), Senior Clerk to Junior Accountant, Accounting, Toronto.
Joyce, K. E. (Miss), Secretary, Polar Gas Project, Toronto to Secretary, Engineering and Operations Compressor, Toronto.
Kapkey, W., Maintenance to Utility, Engineering & Operations, Ile des Chenes.
McLachlin, K. M., Maintenance to Utility, Engineering & Operations, Cabri.
Ottoson, A. C., Maintenance to Utility, Engineering & Operations, Upsala.
Pusch, G. K., Maintenance to Utility, Engineering & Operations, North Bay.
Roost, M. F. (Mrs.), Executive Secretary, Engineering, Toronto to Executive Secretary, IPEL.
Rout, D., Maintenance to Utility, Engineering & Operations, Cobourg.
Snow, W. E., Administration Assistant, Engineering & Operations Administration, Toronto to Administration Assistant, Polar Gas Project, Toronto.

GOODBYE TO – March

Callin, H. I., Gas Supply, Calgary
Duffy, J. E., Treasury, Toronto
Galloway, W. B., Operations, Maple
McCannan, K. W., Operations, Ignace
Underhill, D. (Mrs.), Gas Supply, Calgary
Wiens, R. W., Engineering, Compressor Design, Toronto

April

Carlson, M. E., Operations, Toronto
Clark, M. J., (Mrs.), Accounting Toronto

RETIREMENTS:

Lapierre, C., Operations, North Bay
Colmer, T. H., Corporate Secretarial & Right-of-Way, Toronto
Whytock, W., Information Services, Toronto

Salute to SERVICE

Five Year

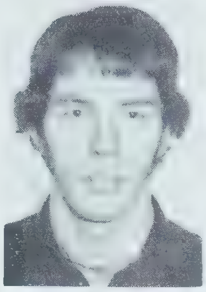
D. J. Rout
Operations
Cobourg
March 16

Otto Friesen
Operations
Herbert
April 1

N. C. Glassman
Eng. Admin.
Toronto
April 1

R. G. Mazzocato
Operations
Haileybury
April 1

E. R. Ingold
Operations
Toronto
April 6



J. D. Lowes
Operations
Moosomin
April 16

R. B. Simes
Operations
Winnipeg
April 16

J. G. Kalandra
Engineering
Toronto
April 20

W. F. Reed
Eng. Admin.
Toronto
May 11

B. P. Ashworth
Operations
Toronto
May 25

Fifteen Year

K. E. Darg (Mrs.)
Administration
Toronto
April 11

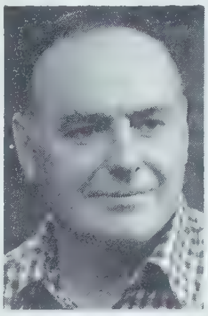
C. K. Lundstrom
Operations
Smooth Rock Falls
April 18

George Schick
Operations
Burstall
May 1

S. B. Arguin
Operations
Western Area
May 3

D. B. Dunlop
Operations
Caron
May 3

J. H. McKnight
Operations
Winnipeg
May 3



A. R. McNarland
Operations
Winnipeg
May 3

B. A. Bruvall
Operations
Ignace
May 4

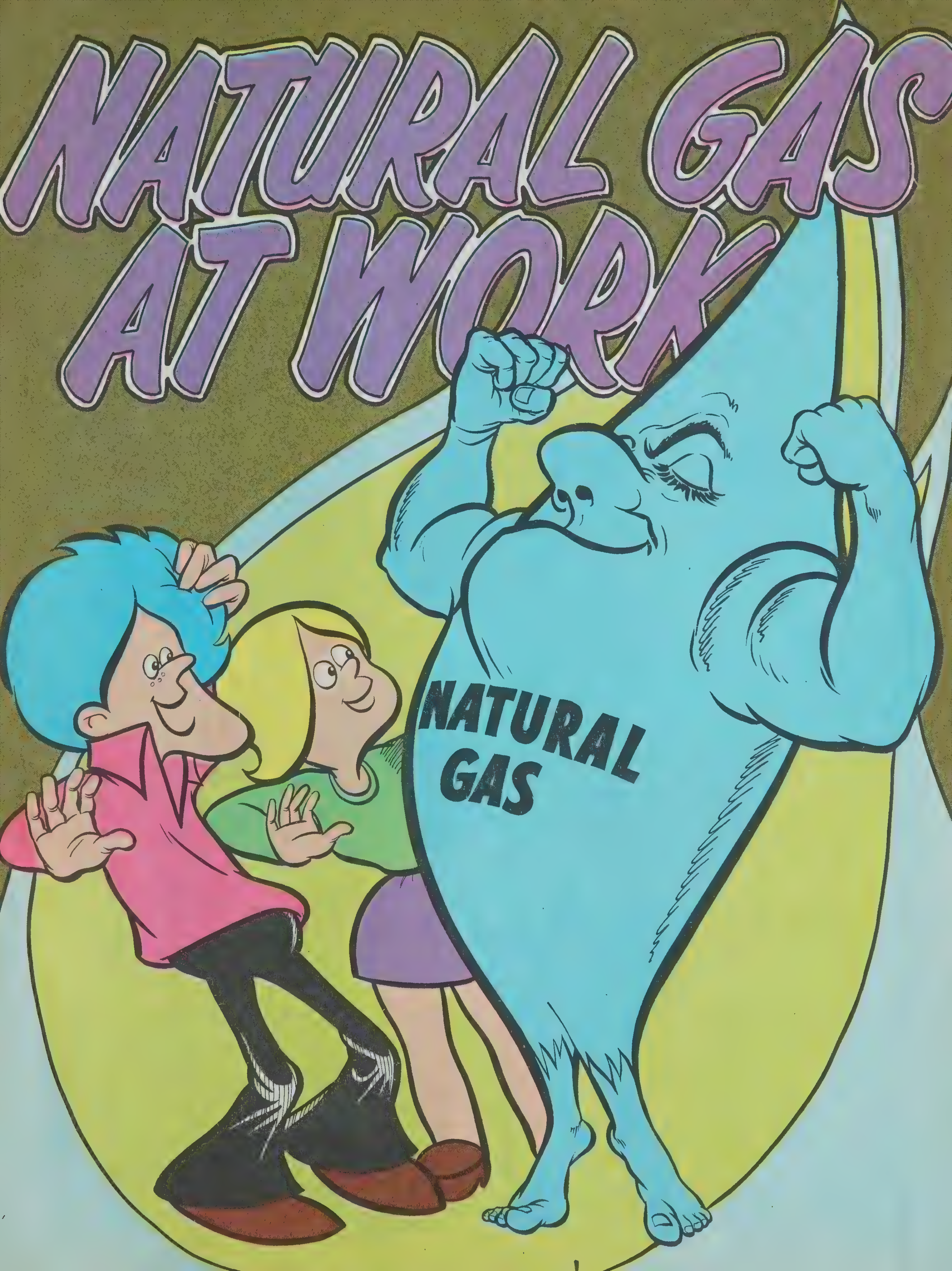
G. A. Holdal
Operations
Moosomin
May 4

H. L. Schmidt
Operations
Burstall
May 16

A. T. Yorke (Mrs.)
Treasury
Toronto
May 25

BIRTHS:

Anderson, M. L., Eng/Ops, Thunder Bay, Boy, Stephen James, April 11
Baqui, Abdul, Eng/Ops, Toronto, Boy, Adnan, March 21
Carlson, A. D., Eng/Ops, Upsala, Girl, Suzanne Nicole, March 7
Doherty, D. R., Eng/Ops, Ile des Chenes, Girl, Laura Dianne, May 20
Harbottle, G. J., Eng/Ops, Falcon Lake, Girl, Sheri Mae, March 5
Kanjee, Shamsudin, Eng/Ops, Toronto, Girl, Natasha Nasreen, April 24
Marshall, A. F., Eng/Ops, Ancaster, Boy, Jarett Bradley, March 3
McGregor, R. R., Gas Supply, Calgary, Boy, Rob R. Jr., March 31
Miskic, Davor, Facilities Planning, Toronto, Boy, Gordon Franjo, February 10
Moore, W. R., Printing, Toronto, Girl, Lisa Ann, April 3
Romas, J. E., Eng/Ops, Ignace, Girl, Sherri-Lynn, October 12, 1974


NATURAL GAS AT WORK
NATURAL GAS

Canada is a land of enormous energy resources. It is a vast storehouse of minerals, and fossil fuels such as coal, oil and natural gas. Its mighty rivers supply the means to make huge amounts of hydro electric power.

The growth of Canadian industry is vividly illustrated by the vast increase in the demand for energy. Until the mid 1940s, wood and coal were the main sources of fuel for home heating and cooking and for industrial energy in Canada. The discovery of vast supplies of oil and natural gas at Leduc, Alberta in 1947 changed that picture and now more than 75% of our total expanding energy demand comes from these two fuels.

While our demand for energy increases, our need to use it wisely also increases. It is important to realize that no country has enough energy to waste; supplies are limited and everyone must develop habits which reflect wise energy use.

Natural gas is a popular fuel because it can be transported easily, its burning temperature can be closely controlled and it is the cleanest of all fossil fuels, an important point in the fight against air pollution.

In order to bring natural gas to the heavily populated industrial centres it was necessary to engineer and construct a complex network of underground pipelines through some of the world's most difficult and varied terrain . . . through the towering Rocky Mountains, under the wide Prairies, and through the vast, rugged *Precambrian Shield.** Natural gas is moved through the pipelines by huge compressors powered by *reciprocating** engines, gas turbines or even jet engines!

But the saga of the pipelines is only one chapter of the exciting story of natural gas which actually began millions of years ago and there are many other chapters in this story. One of the most interesting is "The place of the Natural Gas Industry in Canadian Life", and here we learn:

ENERGY: In 1950, natural gas contributed a mere 3% of our total energy used. It was known and used in Alberta and in a small part of Ontario. Gas is now widely used and is piped to communities from Montreal to Vancouver accounting for more than 25% of our greatly increased annual energy use.

BY-PRODUCTS: Some of the by-products of natural gas are *sulphur** and natural gas liquids, such as propane, which is used for cooling and heating in homes and cottages, butane, used in cigarette lighters and natural gasoline which is used to make plastics.

ASSOCIATED INDUSTRIES: Some of the industries closely related to the development of the natural gas industry and which help to bring natural gas from the wells to the consumer, are the manufacturing of compressor equipment, controls, meters, valves and pipe.

Another, the petrochemical industry, is a world of chemical wonders. Natural gas, and the liquids extracted from it, are combined with other substances to create many *synthetic** materials which result in new industrial products. Plastics, fertilizers, medicines, explosives, synthetic rubber, fibres, detergents and solvents are just a few of the miracle products of these industries which employ a large part of the Canadian labor force.

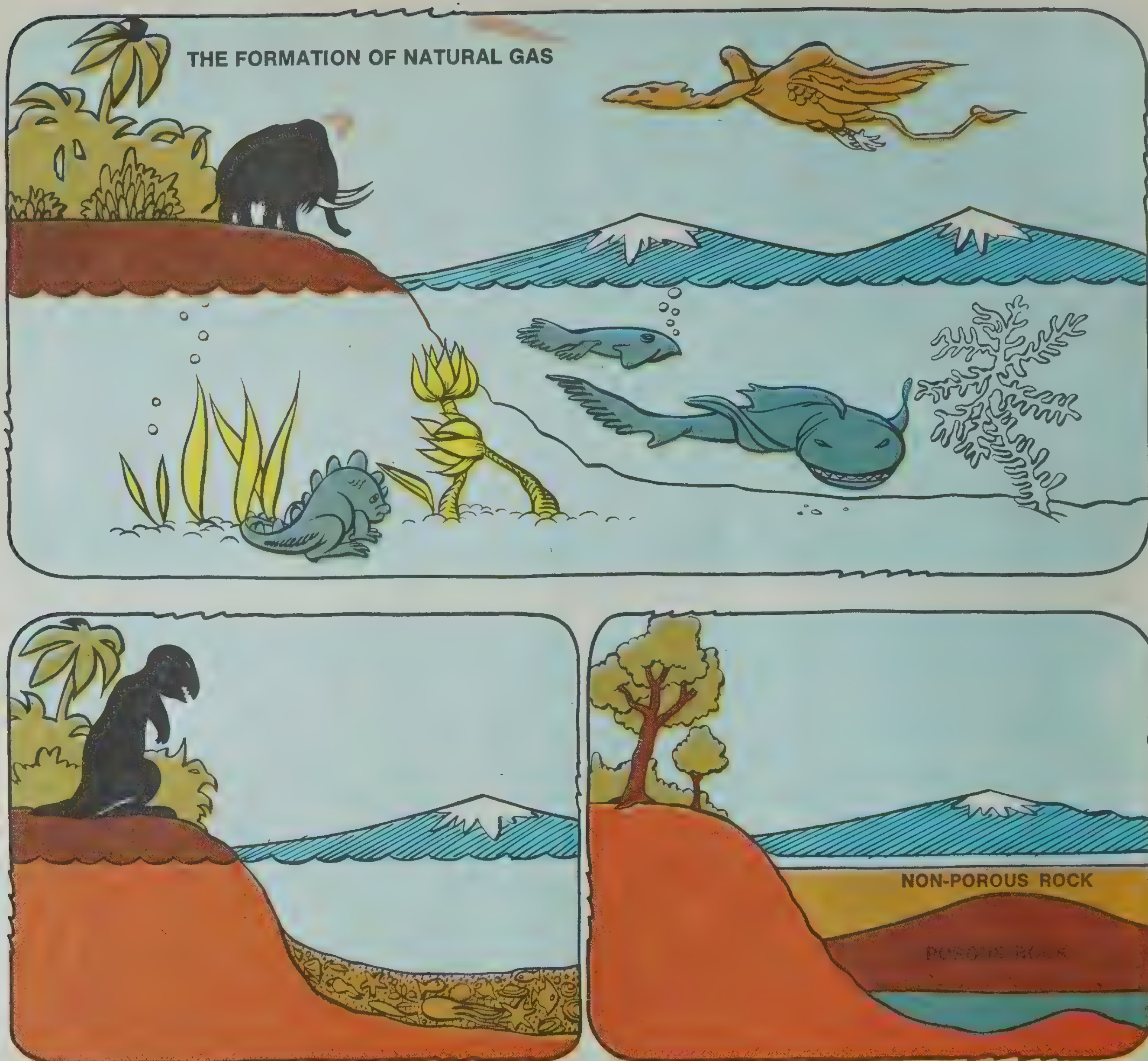
Natural gas is used in the production of many of the chemical fertilizers on our farms today. As a fuel it is also used to dry hay, alfalfa and grains to prevent them from spoiling; to pasteurize milk and to stop frost damage in orchards. Natural gas-heated brooders "mother" baby chicks, and powdered eggs are dried in natural gas-fired vats.

From natural gas come many of the man-made fabrics, such as acrilan, dacron, nylon and orlon. Gas is used to process cotton and wool and is employed in bleaching, dying and printing on cloth.

*Turn to page 14 to find out what this word means.

The major advantages of natural gas as a fuel are based on the facts that:

Because natural gas produces a flame when burned, it can be dangerous if not used correctly. The gas industry advises customers to follow the operating instructions on all equipment and appliances and your gas company asks consumers to contact them if an appliance does not work or there is the smell of gas in your home.



THE FORMATION OF NATURAL GAS

How was natural gas made? When was "stored sunshine" hidden deep under land and sea?
It all started millions of years ago when prehistoric seas covered most of the earth. Tiny plants and animals, living in these waters, were buried in layers and layers of mud, sand and silt and transformed by gradual decay, heat and pressure into gas and oil. Earthquakes and other natural disturbances buckled the earth and trapped this gas and oil under masses of *non-porous** rock, such as the *Western Canada Sedimentary Basin** which covers most of Alberta, and parts of the Northwest Territories, Yukon Territory, British Columbia, Saskatchewan and Manitoba. This is where most of our natural gas comes from. When it comes from the well, natural gas is made up of several gases such as methane, ethane, propane, butane and *inert** gases. Most of these are compounds of carbon and hydrogen and are called hydrocarbons. The natural gas that heats your home is colourless, tasteless and lighter than air, and has the chemical formula CH_4. Natural gas should not be confused with automotive gasoline — which is a product of crude oil.

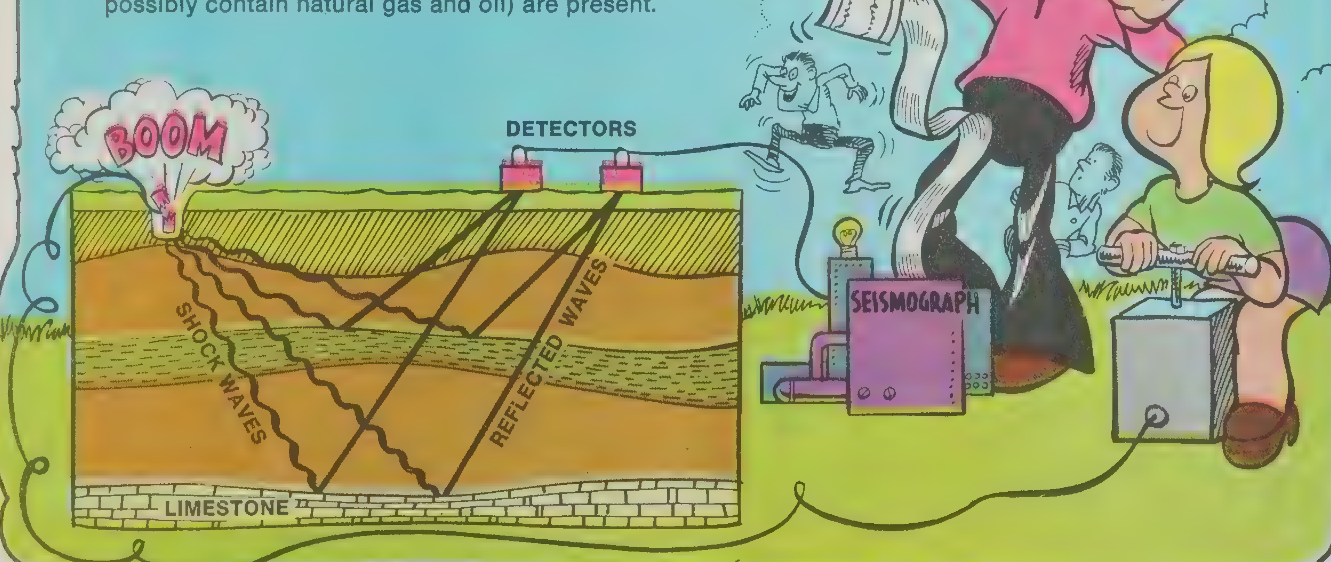
*Turn to page 14 to find out what this word means.

EXPLORER'S TOOLS

The romatic type of exploration commonly associated with gold rush stories has little place in the search for gas or oil. Modern techniques include the use of aircraft for mapping and magnetometer surveys. The magnetometer is a device which measures magnetic forces, to reveal the location of underground domes in the earth's "basement" rocks. These domes may contain natural gas or oil.

UNDERGROUND EXPLORING BY SHOCK WAVES

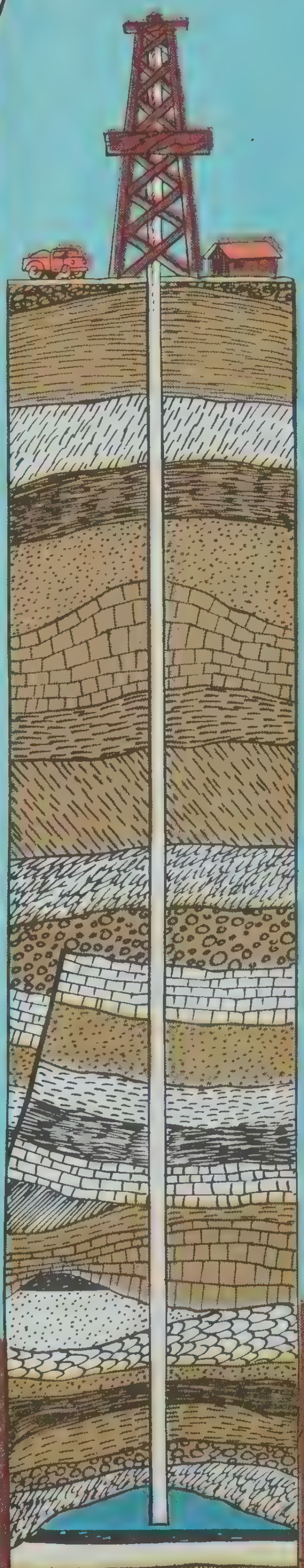
One of the most interesting geophysical techniques is the seismic or "Shock Wave" survey. Explosives detonated in the ground set off shock waves which echo back from the different layers of rock. The waves are received and timed by a complex instrument called a seismograph. This gives the explorer a "picture" of the rock layers or strata beneath the earth's surface and tells him if domes (which may possibly contain natural gas and oil) are present.



TEST DRILLING AND THE DRILLING RIG

The only way to be absolutely certain that natural gas is present in rock formations is to drill deep into them. This is called "wildcatting" and is usually done by a rotary drill bit driven by a powerful engine.

Drilling is very expensive depending on the depth, and location of the well. The cost of drilling a single well could be more than a $1,000,000, and in the frontier regions, such as the far north or under the oceans, the cost is much higher. Most wildcat wells prove to be failures, or "dry holes", which produce no gas.



THE "CHRISTMAS TREE"

After a productive gas well has been drilled, the flow of gas is controlled by a complex arrangement of pipes and valves, known as a "Christmas Tree", which is the only visible evidence of a gas well.

GAS PROCESSING

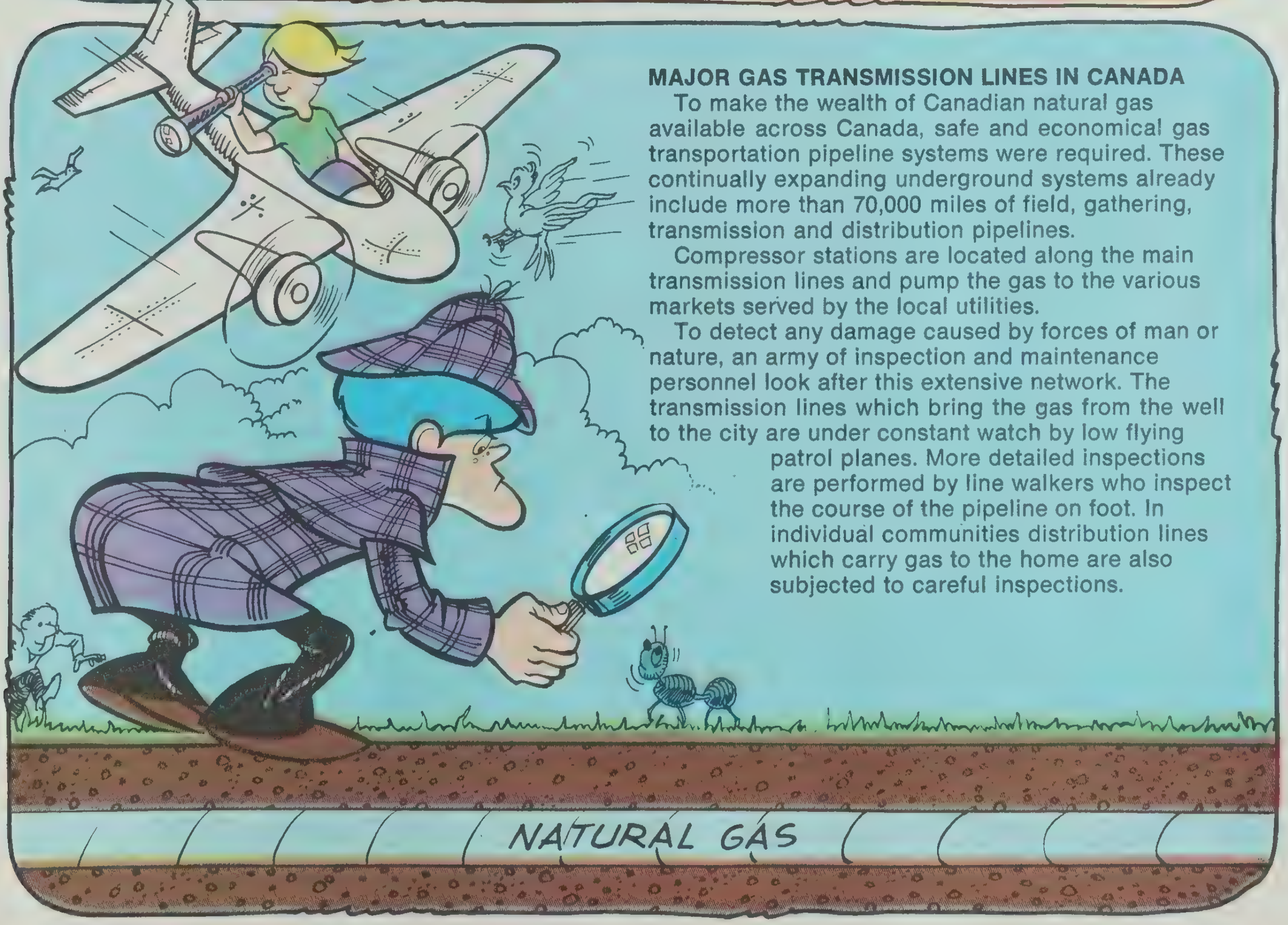
Processing plants located close to natural gas fields purify the gas to pipeline quality, removing sulphur and other impurities. At the same time, valuable natural gas liquids such as propane, butane and natural gasoline are removed and sold separately.

MAJOR GAS TRANSMISSION LINES IN CANADA

To make the wealth of Canadian natural gas available across Canada, safe and economical gas transportation pipeline systems were required. These continually expanding underground systems already include more than 70,000 miles of field, gathering, transmission and distribution pipelines.

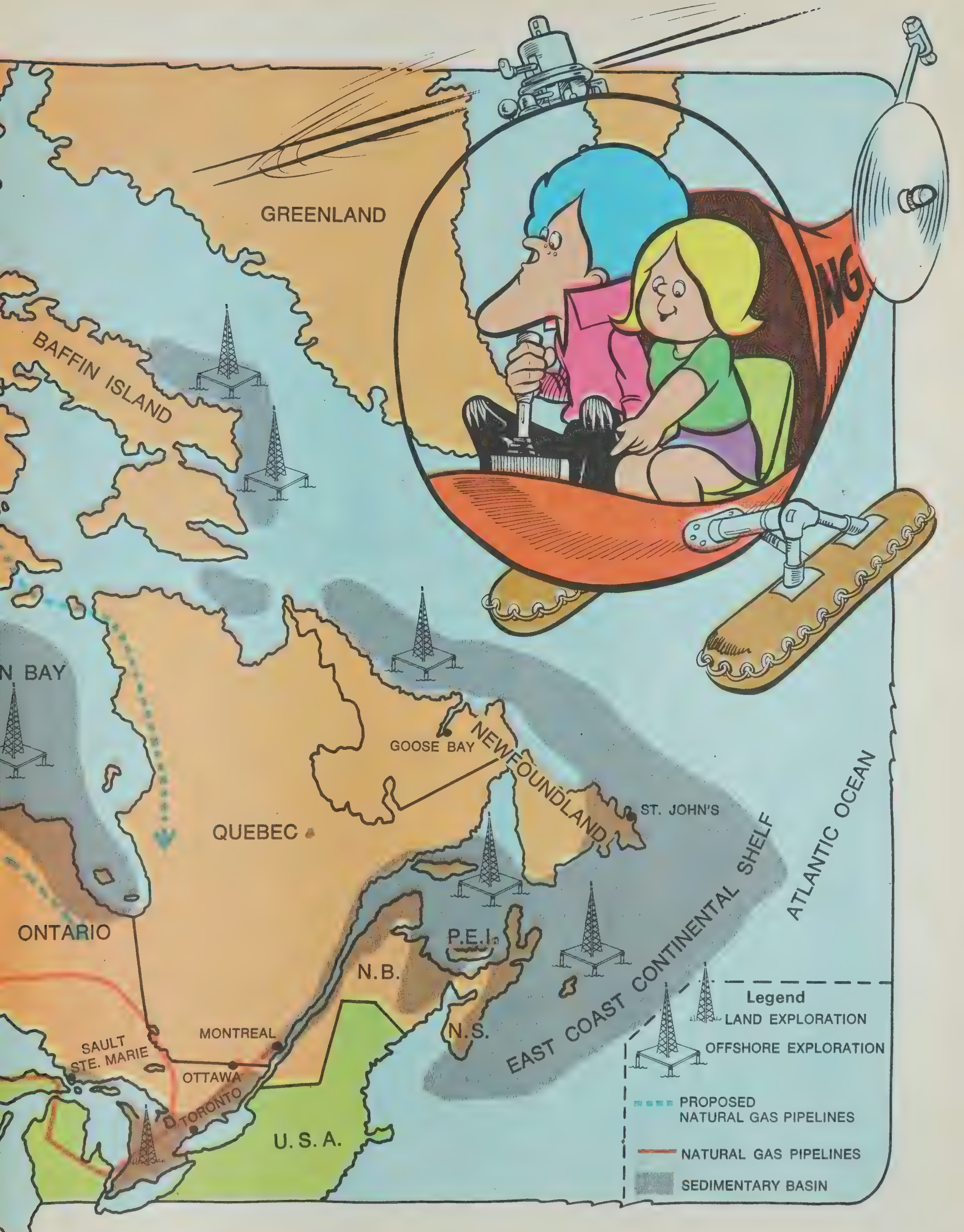
Compressor stations are located along the main transmission lines and pump the gas to the various markets served by the local utilities.

To detect any damage caused by forces of man or nature, an army of inspection and maintenance personnel look after this extensive network. The transmission lines which bring the gas from the well to the city are under constant watch by low flying patrol planes. More detailed inspections are performed by line walkers who inspect the course of the pipeline on foot. In individual communities distribution lines which carry gas to the home are also subjected to careful inspections.



FRONTIER EXPLORATION

Although 80% of all the natural gas used in Canada comes from Alberta, large quantities have recently been discovered in the sedimentary rock formations of the Mackenzie River Delta — Beaufort Sea area, the Arctic Islands, and the continental shelf region off Canada's east coast. Exploration companies build man-made islands as drilling sites in the shallow Beaufort Sea and use floating drilling rigs in the deeper waters of the Arctic and the Atlantic oceans in their search for gas.


GREENLAND
NG
BAFFIN ISLAND
N BAY
GOOSE BAY
NEWFOUNDLAND
ST. JOHN'S
QUEBEC
ATLANTIC OCEAN
EAST COAST CONTINENTAL SHELF
P.E.I.
ONTARIO
N.B.
N.S.
SAULT STE. MARIE
MONTREAL
OTTAWA
TORONTO
U.S.A.
Legend
LAND EXPLORATION
OFFSHORE EXPLORATION
PROPOSED NATURAL GAS PIPELINES
NATURAL GAS PIPELINES
SEDIMENTARY BASIN

URBAN DISTRIBUTION

In the transmission pipeline the gas is under pressure of up to 950 pounds per square inch. On reaching a city, the pressure is lowered by *regulators** in stages to the pressure required by its user and the volume of gas entering the city system is accurately measured. For use in homes, the gas pressure is normally reduced to about three ounces, but nearby industrial plants may require much higher pressures.

NATURAL GAS AND OUR ENVIRONMENT

Natural gas has been called nature's wonder fuel and it is helping us to live in our environment more comfortably without destroying it through pollution.

It is important to note, that natural gas does not pollute the water, does not permanently damage our land, (pipeline construction routes are restored to their original state) and offers great hope for reducing air pollution.

Natural gas is the cleanest burning of all fossil fuels — releasing very few pollutants, such as sulphur into our air. Through a change to cleaner fuels such as gas and through other efforts, one of the world's major cities, London, England has been able to reduce pollution greatly. Birds which had left the city are now returning as well as fish to the city's river Thames.

*Turn to page 14 to find out what this word means.

SPACE AGE METALLURGY

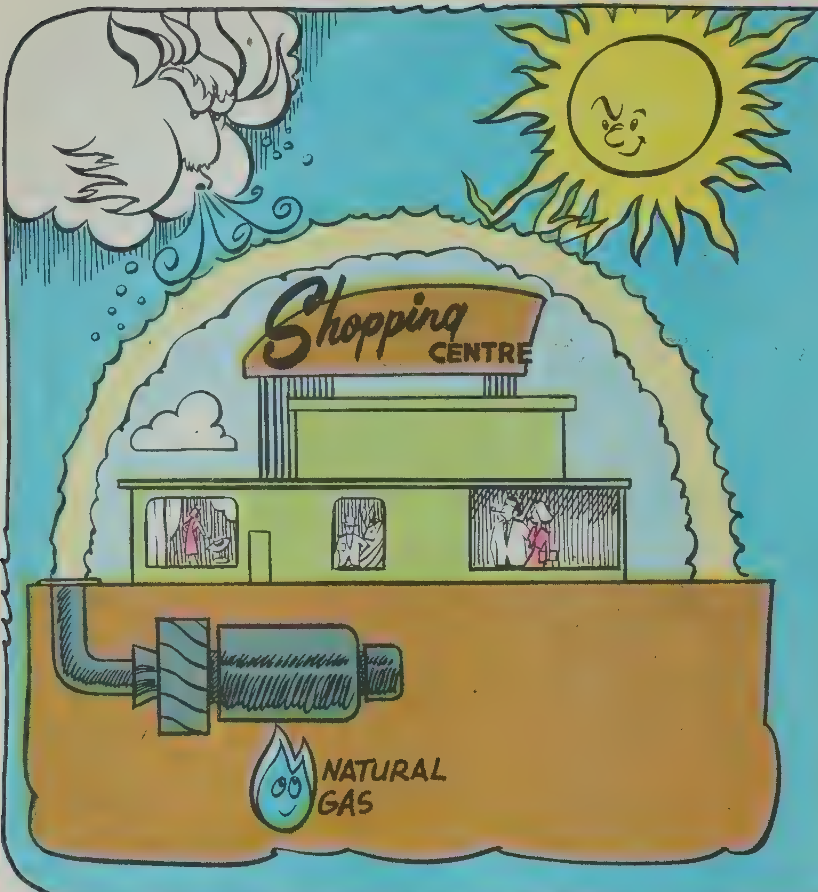
The ancient and the new . . . natural gas has been known to man as a source of heat energy for hundreds of years. Today, some of the most exciting advances in the science of metallurgy are those concerned with space research and rocketry. In the development of the strong, heat-resistant metals needed for the production of missiles and nose cones, natural gas is playing an essential role. For example, the space capsules of the Apollo series that enabled man to reach the moon and return safely to earth were treated with high temperature gas heat to withstand the intense heat of friction of blast off and re-entry into the earth's atmosphere.

METAL REFINING

The production of steel is dependent on the controlled heat available through the use of gas. *Steel ingots** can be brought to an even temperature throughout in huge gas ovens called 'soaking pits' before entering the rolling mill.

Other *metallurgical** industries involved in the production of special alloys use precise high-temperature gas flames which permit close control of the different processes and which also maintain the metals in a liquid state until ready for pouring into moulds.

*Turn to page 14 to find out what this word means.

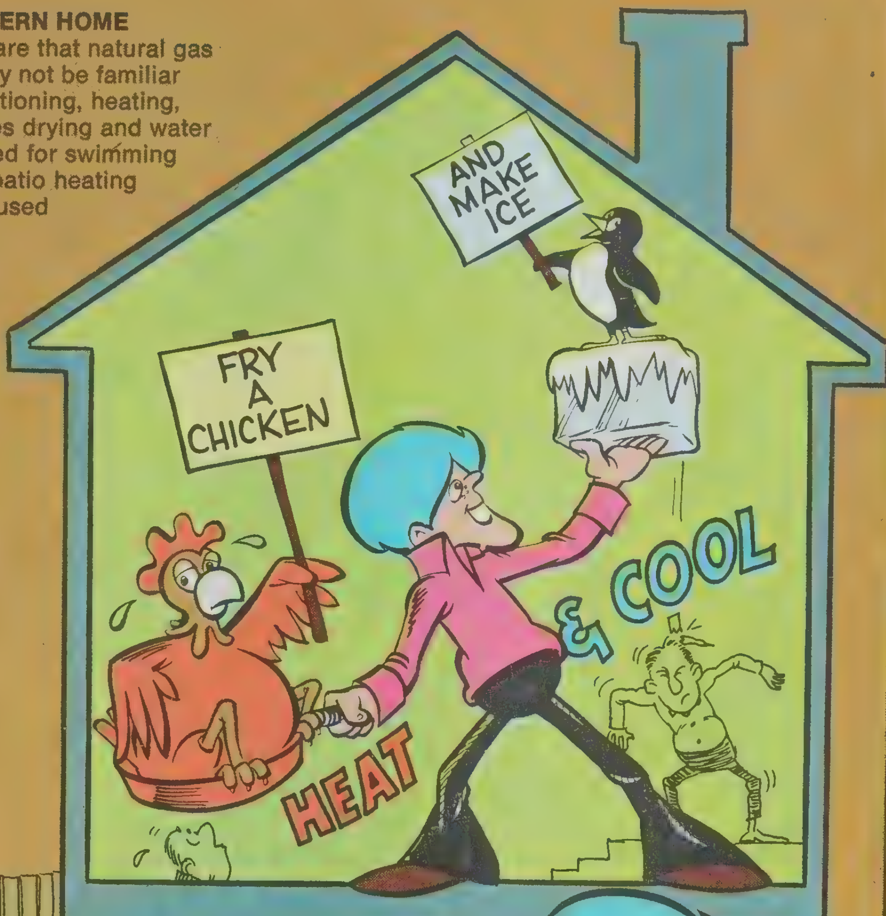


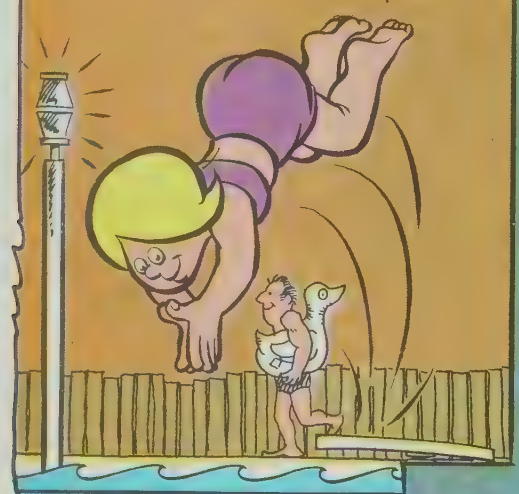
THE GAS TURBINE
Natural gas can supply all the energy needs of shopping centres and industrial plants. The gas-fired turbine is an important link in "total energy systems" which supply electricity heating and cooling.

GAS INTO GLASS
Natural gas plays an important part in the production of TV tubes, automobile windshields and many of the precision glass products required in industry, science and medicine.

USES OF GAS IN THE MODERN HOME

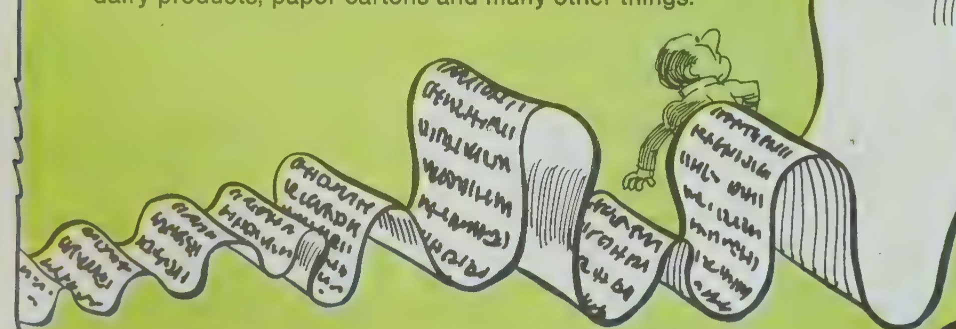
Although you are well aware that natural gas is used in the home, you may not be familiar with all of its uses: air conditioning, heating, cooking, incinerating, clothes drying and water heating. Outdoors gas is used for swimming pool heating, barbecueing, patio heating and lighting. It can even be used to melt the snow on your driveway.





NATURAL GAS HAS THOUSANDS OF USES

Natural gas is surely one of the most versatile resources known to man. There are more than 26,000 applications for natural gas in the manufacturing or processing of countless everyday items such as: housepaint, shingles, eavestroughs, milk bottles, glass, plastics, toys, fabrics, car tires, chrome, concrete, bricks, fertilizers, bread, dairy products, paper cartons and many other things.



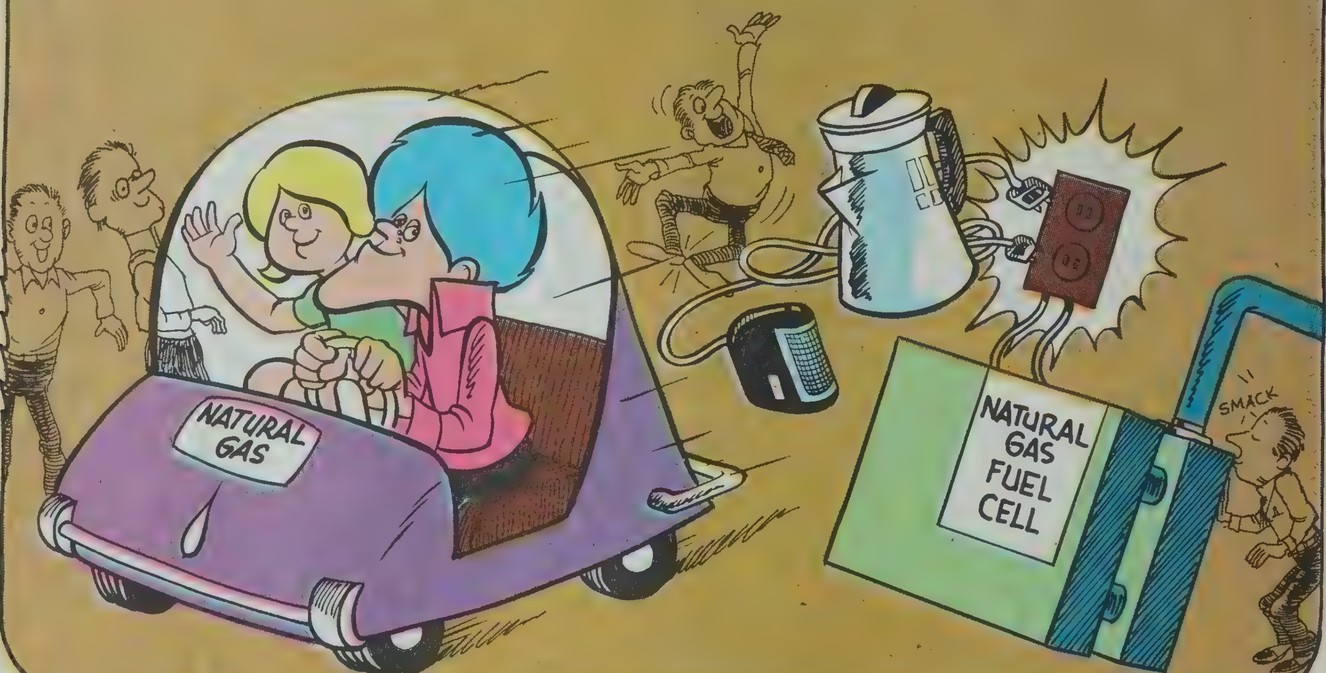
NATURAL GAS IN THE FUTURE

Research into the development of new products and uses for natural gas is going on all the time. Two of the most interesting experimental programmes are the natural gas fuel cell and the dual-fuel vehicle.

The fuel cell is a device which was used on Apollo and Gemini space crafts to produce electricity from gaseous fuels. It is a small space saving device which combines fuel with oxygen in the air and through a special process produces electricity.

The dual-fuel vehicle is a car or truck which runs on gasoline, or natural gas. Natural gas burns cleaner than gasoline and may play an important role in reducing air pollution in our cities, where up to 60 per cent of air pollution is caused by automobiles.

Both the dual fuel vehicle and the fuel cell are being tested presently in Canada.



GLOSSARY OF TERMS

WESTERN CANADA SEDIMENTARY BASIN (Sed-i-men-ta-ree). A geographical area (see map) which contains Canada's energy reserves, called sedimentary because the areas contain rocks formed from original deposits of mud, sand or gravel from rivers, lakes and seas.

INERT GASES (In-ert). Gases which can not be converted to a useful purpose.

METALLURGICAL (Metal-ur-gik-al). The art of working metals — separating metals from other components in ore.

NON-TOXIC (Tok-sik). Not poisonous, will not poison you.

NON-POROUS (Pour-us). Very dense or solid. In this case, rock which has no holes or openings in it to allow gas to escape.

PRECAMBRIAN SHIELD (Pre-came-bree-an). A vast V shaped area around Hudson Bay with rocks of great age. It extends from Labrador, west to the plains of the Prairie Provinces and includes the greater part of Quebec and Ontario (see map). Also known as the Canadian Shield.

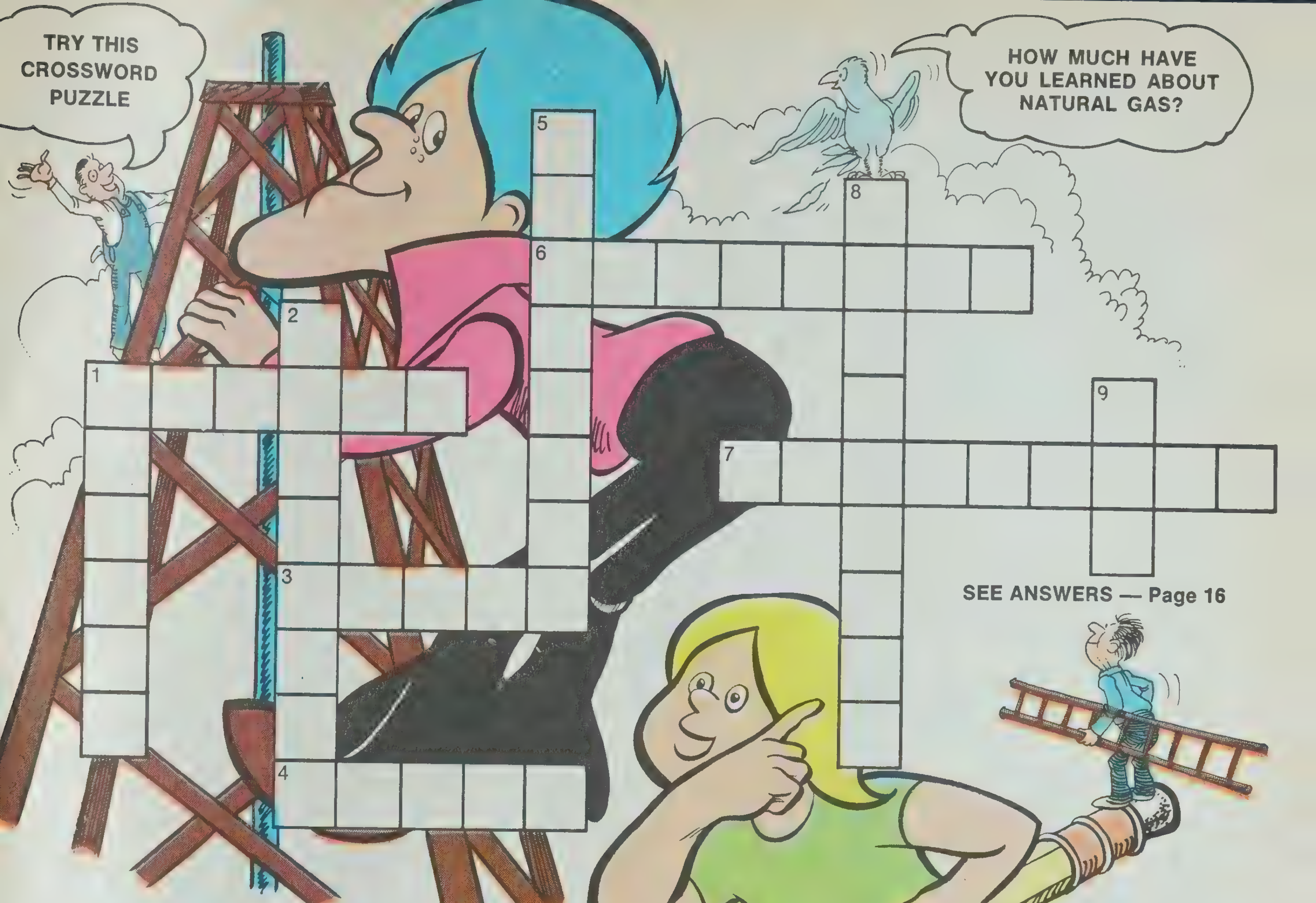
RECIPROCATING (Re-si-pro-kate-ing). In this case, an engine which develops its power through moving parts which go forward and then backward or up and down. Most cars have this type of engine, although it is much smaller than those used in compressor stations.

REGULATORS (Reg-u-lay-tors). Devices which are set to measure and adjust the amount of pressure in the gas line according to requirements.

STEEL INGOTS (ing-ots). Steel which has been formed (cast) into large pieces (usually oblong).

SULPHUR (Sul-fur). A chemical substance, generally yellow in color; an impurity in fuels. Found in clear crystal or gaseous form. It burns very easily with a strong odour or smell.

SYNTHETIC (Sin-thet-ik). Something which is created or made up by combining one substance with another, an artificial rather than a natural product.



ACROSS

1) Exploration crews use the returning .... from explosions (page 5) to find natural gas in the ground.
3) One of the man-made fabrics which comes from natural gas (page 2).
4) Natural gas does not pollute because it is .... (page 10).
6) Natural gas is discovered by .... wells (page 6).
7) Because natural gas is clean it is helping us to reduce .... (page 10).

DOWN

1) One of the other gases in natural gas (page 7).
2) Natural gas is .... which means it will not poison you (page 3).
5) The gases in natural gas are made up of .... and carbon, and are called hydrocarbons (page 4).
8) Natural gas is carried through .... (page 7).
9) The sharp end of a drill is called the drill .... (page 6).

STUDENT ACTIVITIES

1. Using an overhead projector and a sheet of Bristol Board make a map of Canada showing (a) the sources where natural gas is produced; (b) the areas where natural gas is likely to be produced; (c) the routes used to transport gas to major cities.
2. Make a pictorial essay using a camera of natural gas installations in your neighbourhood. Start with the gas meter outside your home, gas lamps in the neighbourhood, etc.
3. Make a Bristol Board size collage of man-made fabrics that are the by-products of natural gas such as: acrilan, dacron, nylon, orlon, etc.
4. Make a mural showing the uses of natural gas as far as it is used in food production, uses in industry, the home, etc. Use picture cut-outs from old catalogues and magazines.
5. Look through newspapers, magazines, etc. for stories, articles, pictures, or any information on natural gas. Display it so that it conveys a specific message — ie:

   (a) the world's concern over energy
   (b) gas from the ocean
   (c) gas from the Arctic ---
6. Do a survey in your class to find out: How many homes use natural gas for heating, cooking, etc. in your school community.

TransCanada PipeLines

Produced by the Canadian Gas Association, Don Mills, Ontario, 1975

along the line

November 14, 1975

TransCanada shares environmental concern with 6,000 neighbors on pipeline route

Cabri General Foreman Len Burkholder (left) discusses this year's wheat crop with a farmer on TransCanada's right-of-way in Saskatchewan.

Good neighbors are as important to corporations as they are to individuals. No one knows this better than the employees of Right-of-Way and Environmental Affairs—a department of Engineering and Operations. These employees deal directly with the Company's neighbors and their watchword is concern.

TransCanada PipeLines' natural environment embraces more than 2,300 miles of land and water along the pipeline route stretching from the Alberta-Saskatchewan border to eastern Quebec. The Company shares its concern for this environment with approximately 6,000 landowners.

The Company's neighbors are a varied group. They include ranchers, farmers, foresters, small and large industries, and private homeowners. Each landowner along the pipeline route has his own special requirements regarding how his land is being used by the Company and we, like any good tenant, must understand those requirements to ensure that we establish and maintain good relations with these landowners.

The Company's Right-of-Way and Environmental Affairs Department has five permanent Right-of-Way agents located in Brandon, Thunder Bay, Kapuskasing, Toronto and Belleville. According to Manager Doug Calder, these men personally know many of the landowners and they are familiar with almost every property in their particular territories.

TransCanada's Right-of-Way agents are a liaison between the landowners and the Company. This liaison is a clear, twofold duty. The agent must thoroughly present the Company's program to the landowner and, just as conscientiously, he must make the landowner's requirements known to the Company.

Additional land agents are added to the Department's staff during peak construction periods. These skilled employees work with the Company's contractors to ensure minimum inconveneince to the landowners. Every effort is made by TransCanada to restore the land in accordance with the landowners' wishes on completion of construction.

Front cover
Land Agent Bob Jack inspects a farm property on TransCanada PipeLines' right-of-way near Barrie, Ontario during pipe replacement work in October. The Company's Right-of-Way and Environmental Affairs Department has five permanent agents located across the system. These agents work with the Company's operations employees in the field to service the day-to-day needs of landowners on the pipeline right-of-way.

TransCanada's five permanent Right-of-Way agents cannot service the day-to-day needs of all the landowners due to the distances between the agents' locations.

"A lot of these problems are handled by our operations people," said Mr. Calder. "Things like assisting a farmer in planning and carrying out a drainage program across the right-of-way or changing a fencing scheme."

"When you get into the urban areas of southern Ontario where private homes are being constructed on each side of the right-of-way, our Engineering/Operations and Right-of-Way people work closely with land developers and government planning agencies in the building of communities along the pipeline route," he said.

Approximately 1200 miles of TransCanada's right-of-way is agricultural land. Topsoil is both scientifically and personally valuable to the farmer. He

Construction crews work on a section of replacement pipe in a Maple grove on the right-of-way in southern Ontario. TransCanada's construction supervisors work with the Company's contractors to ensure that as few trees as possible are removed.

has probably developed it with painstaking care over many years—possibly decades—by cultivation, fertilization, and hard work. Agricultural land is becoming more valuable to Canadians as the Country's population increases.

During pipeline construction the topsoil is removed and placed to one side of the trench. After the pipe is lowered and the trench is back-filled, the topsoil can be replaced. The aim is to complete the operation with virtually no mixing of topsoil and subsoil. The Company attempts to dispose of rock in a manner that is beneficial to the property owner.

The protection of farm drainage requires much attention during and after pipeline construction. Drainage can improve the productivity of the soil up to 50 per cent. Some existing drainage systems were hand-dug by the farmers who presently work the land.

TransCanada works with local natural resource and conservation authorities to handle specific environmental matters. For example, when an underwater crossing is planned, the Company consults the navigation, fish and wildlife agencies that administer the body of water. After construction, all underwater pipe crossings are checked regularly to guard against any adverse changes, particularly erosion of the river banks.

In forested areas such as northern Ontario the Company endeavors to schedule construction so that clearing takes place in the fall, winter, or early spring when underbrush can be burned with minimum fire hazard. TransCanada's construction supervisors work with the Company's contractors to ensure that as few trees as possible are removed.

The cleared right-of-way—which varies in width across the stystem from approximately 200 feet to 40 feet—provides a firebreak and is not a hazard to wildlife. In fact, large animals tend to use the right-of-way in forest areas as a path.

This bank of the Big East River on TransCanada's right-of-way near Huntsville, Ontario was recently reconstructed to control erosion. The Company's Engineering and Operations Department designed and supervised construction of the project.

This attractive section of TransCanada's right-of-way, at the Rideau Canal crossing near Kingston, Ontario was restored in the summer following pipeline replacement work.

Mr. Calder reports that government officials across the system have said the pipeline right-of-way is a wildlife and recreational asset to many communities through which it passes—particularly in northern Ontario where there are large expanses of wooded areas.

Natural gas is one of the least polluting forms of energy and its escape does not cause significant disturbance of either soil or air. However, the entire TransCanada right-of-way is inspected regularly to detect minor leaks or security problems.

Company helicopters and patrol planes fly the route at just above treetop level. Whenever they spot heavy equipment too close to the line, or discolored vegetation which may indicate a pin hole leak, or unauthorized activities on the right-of-way, they radio the nearest compressor station for an operations crew to go to the site.

TransCanada sends calendars which contain the name, address and telephone number of the Company's District Manager, to all landowners who have dealings with the Company, municipalities through which the pipeline passes, and all other government agencies interested in the Company's work. The 1976 calendar will feature an attractive painting of recent pipeline construction near Grafton, Ontario, by Canadian artist Hilton Hassell.

Mr. Calder said, "The calendars provide another measure of security along the system because they help landowners to reach the Company at any time. The calendars have been well received and they strengthen our communication with the landowners."

Company signs at road crossings indicate TransCanada's right-of-way along the pipeline route stretching from the Alberta-Saskatchewan border to eastern Quebec.

TransCanada's construction activity is subject to National Energy Board approval and regulation. Environmental consultants, retained by the Company, brief construction employees and assist them in carrying out the environmental requirements. The effects of a pipeline construction project on the environment are monitored during and following completion of construction.

Some agricultural situations connected with TransCanada's construction operation require special expertise. In these cases the Company seeks the opinion of specialists from the University of Manitoba and Guelph University in southern Ontario.

In keeping with its role as a leading energy company, TransCanada will continue to meet the regulatory and social responsibilities created by the operation of its natural gas transmission system.

Cameron Addresses Australian Convention

"The natural gas industry is in such a state of flux in Canada that no one can speak authoritatively on Canadian gas pipeline approval procedures today." This was stated by James M. Cameron, TransCanada's Executive Vice-President speaking to the 14th Annual Convention of The Australian Gas Association in Canberra, Australia, on October 1.

Mr. Cameron, who is also a director of the Canadian Gas Association, was invited to speak to the Australian Convention on 'The Approval Procedure in Canada for Major Gas Transmission Pipelines.'

Mr. Cameron said that the changes in the Canadian scene have been and are being, caused by two main events. The first is the emergency of OPEC and the resulting sharp increase in the world price of oil. This has led to the introduction of new principles in the regulation of gas prices in Canada which still have to be sorted out. The second is the increasing awareness by man of his environment and the need to protect it if the quality of life is to be preserved.

"This new awareness, coupled with the location of the potential future gas supplies in Canada, has brought a new dimension to approval procedures in Canada insofar as they relate to the construction of new pipeline facilities," Mr. Cameron said.

Mr. Cameron used a series of slides to highlight his speech and had printed copies of his presentation available to delegates. Visiting Australia in early October afforded Mr. Cameron the opportunity to enjoy a second spring in 1975.

Role of NEB in Company Affairs

Editor's Note: TransCanada's Information Services Department followed closely the proceedings of the Company's most recent rate hearing before the National Energy Board, keeping employees informed through information bulletins. Because of the rapidly changing economic and legislative circumstances in which the natural gas industry now finds itself, Al Bailey of the Information Services Department prepared this article for "Along the Line" He describes a little of the background of how government regulations impact on Company affairs and does so from an interesting starting point.

As a writer-reporter, I couldn't help but wonder what was going through A. Deane Nesbitt's mind one evening last August in an Ottawa hotel. Before him, stacked on the table, was book upon book of financial data. It was one of those large, high ceiling rooms in the Chateau Laurier Hotel, its atmosphere somewhat Victorian. To Mr. Nesbitt the scene must have had a familiar appearance.

And, understandably. It was some 20 years ago in this same hotel that Mr. Nesbitt played a key role in top-level meetings aimed at putting TransCanada PipeLines in business.

Involvement with government, then as now, was not new to Mr. Nesbitt in his long association with the Company. After all, the Company came into being on the strength of people like Mr. Nesbitt gaining government support for the natural gas pipeline concept, and the Company would function from the out-

Supporting TransCanada's application is A. Deane Nesbitt, Chairman and Chief Executive Officer of Nesbitt Thomson and Company Limited and a director of TransCanada PipeLines.

set subject to government regulation. Virtually within months of becoming an operating Company, TCPL came under the watchful eye of the Board of Transport Commissioners.

Now, two decades later Mr. Nesbitt was again in a prominent role, supporting TransCanada's application for a fair and reasonable rate of return to allow the Company to maintain financial integrity for current security holders and to permit TCPL to attract capital at reasonable costs.

NEB ACT IMPLEMENTED

Although the National Energy Board Act was implemented in 1959 by the Federal Government, the year after TransCanada commenced operations, the Company's rates until 1973 were based on contracts with its distribution company customers.

The NEB was established and designated a Court of Record. In matters such as attendance of witnesses, production of documents and enforcement of its Orders, the Board was given all the powers of a Superior Court.

The NEB issued a General Order in the fall of 1969 making Part IV of the Act (concerning Rates and Tolls) applicable to all interprovincial pipelines—both oil and gas.

The broad intent of the Act was to ensure the people of Canada the best and most effective use of energy resources.

It is the Board's responsibility to study, keep under review and report to the Minister of Energy, Mines and Resources all matters over which the Parliament of Canada has jurisdiction relating to the exploration, production, recovery, manufacture, processing, transmission, transportation, distribution, sale, purchase, exchange and disposal of energy and sources of energy within and outside Canada.

The Board's regulatory role covers the issuance of Certificates of Public Convenience and Necessity for facility additions following public hearings.

There are certain items for which the Board can issue a Certificate to a pipeline company seeking to make minor additions and modifications to its system without calling a public hearing. Included in this list are sections of pipeline or branches not exceeding 25 miles in length, tanks, pumps, compressors, meter stations, communication systems, etcetera. Provincially incorporated companies can also receive NEB authorizations to undertake interprovincial or international pipeline construction providing the line is less than 25 miles in length.

The National Energy Board panel selected to hear the proposals to carry natural gas from the Mackenzie Delta includes, from left, W. A. Scotland, M. A. Crowe and Jacques Farmer.

Public hearings are required for Licenses and Orders authorizing the export of gas and oil and the import of gas. In 1970 the Board decided to hold public hearings with regard to setting and revising TransCanada's rates, tolls and tariffs.

The Board may disallow any tariff filed or any portion of it that it considers contrary to any provision of the Act, and it may require a company to file a subtitute tariff satisfactory to the Board, or it may prescribe other tariffs in place of those disallowed.

Another type of public hearing in which the Board has recently been engaged concerns availability and requirements of fossil fuels. Hearings of this nature were held in major centres across Canada in late 1974 and early 1975 and resulted in the most definitive study to date of future Canadian natural gas and oil supplies and requirements.

With respect to gas exports, the Act states that the quantity to be exported must not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada and that the price to be charged for gas, oil or power to be exported must be just and reasonable in relation to the public interest. The Act was recently amended, giving the Board the authority to reduce exports without a hearing if this gas is required for Canadian consumption.

Team representing Canadian Arctic Gas Pipeline Limited at hearing includes, from left; G. E. Creber, Vice-President and General Counsel; Michael Goldie, Counsel for Arctic Gas and D. J. Gibson, Assistant General Counsel.

TransCanada's first application for rate revision was filed with the NEB in August 1969. The hearing commenced in 1971 and a decision was rendered by the Board in May 1973.

That first rate application required 156 hearing days and "was a real mind bender", according to Bruce Escoffery, the Company's Assistant Treasurer and Manager, Rates, who has been extensively involved in all seven of TransCanada's rate hearings before the NEB in the past five years. It was a first-time experience for almost everyone involved, including the panel charged with the responsibility of making a judgment in the case.

John Archambault, the Company's Vice-President and General Counsel, described the most recent hearing on TransCanada's rate application, known as Rate Case No. 7, as "the longest, most arduous and complex case since the first one."

Rate Case No. 7 was held in two phases, the first dealing with depreciation of income tax and the second phase with other cost components, including rate of return on rate base. The second phase of the hearing, by far the most complex portion, began August 25 and concluded October 9. Altogether, the hearing produced 4,040 pages of transcript.

But the hearing was really only the tip of the iceberg. Behind it were 30,000 manhours of preparation by the Company's experts in rate analysis, law, accounting, gas supply, sales, executive personnel and outside consultants.

And for those directly involved in the hearing itself—as witnesses and observers—it meant living out of suitcases and briefcases in Ottawa's Chateau Laurier Hotel for days on end... out of personal contact with family, friends and office.

Associate General Counsel L. H. Pilon and Executive Vice-President J. M. Cameron are shown here prior to the opening of the Mackenzie Valley Pipeline hearing.

NEW POLICY

To reiterate a well-worn phrase, nothing stands still for long. The natural gas industry is no exception.

The Federal Government, with the introduction of the Petroleum Administration Act, has introduced an entirely new policy with respect to the pricing of natural gas at the marketplace, having regard to the value of competing fuels or the 'commodity value' of natural gas. Previously, pricing was based on a cost of service basis.

On October 20, in an announcement by the Department of Energy, Mines and Resources, it was confirmed that effective November 1, the price for natural gas sold in interprovincial trade will be based on a Toronto City Gate price of $1.25 million Btu. At the same time the government set the field price of gas at 72 cents per million Btu.

Under the new policy, producers will receive an additional payment of about 23 cents per million Btu for gas exports at $1.60, making a total of 95 cents. During the contract year 1974-75, the producers selling gas to TransCanada received an average of 43.5 cents per Mcf plus an additional payment of 6 cents to 15 cents per Mcf as a result of excess export revenues.

Although Alberta has indicated it has reached agreement with Ottawa on the level of gas price, it is expected Alberta will enact gas pricing legislation of its own shortly after the Legislature commences on November 12, 1975.

Now, the Board has entered into its biggest case, the Mackenzie Delta hearing. TransCanada PipeLines will be vitally affected by the outcome. In many respects the stakes are as high with respect to frontier gas and the future of Canada as they were some 20 years ago, with the building of the pipeline.

Mackenzie Delta Gas Hearing

The first stage of a five-phase National Energy Board hearing on proposals by Canadian Arctic Gas Pipeline Limited and Foothills Pipe Lines Ltd. to carry natural gas from the Mackenzie Delta to southern markets began in Ottawa October 27.

Second phase of the hearing will deal with contracts, including the examination of supply, transportation, sales contracts and in the case of Arctic Gas and Alberta Natural Gas, contracts for the sale of gas from Alaska to the U.S.

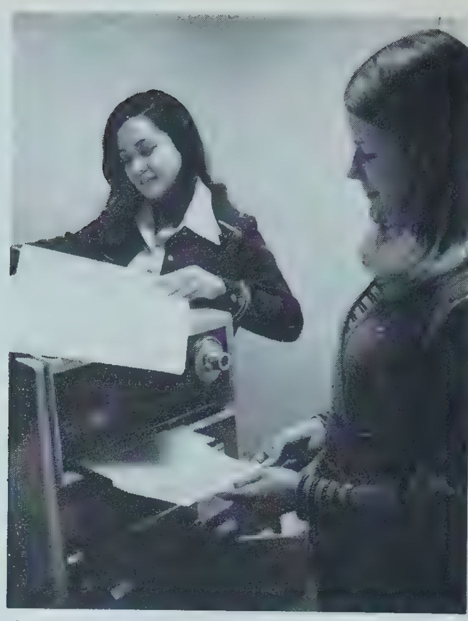
Third phase is on facilities, including right-of-way, alternative routes, design and capacity, connections with other pipeline facilities, construction schedules, costs, operation and maintenance and alternative systems of gas transportation.

The fourth will deal with financial matters, including cost of service, tariffs and financing plans, and the final phase will see the examination of public interests which may be affected, such as the impact on the Canadian economy, environmental and socio-economic factors and Canadian content.

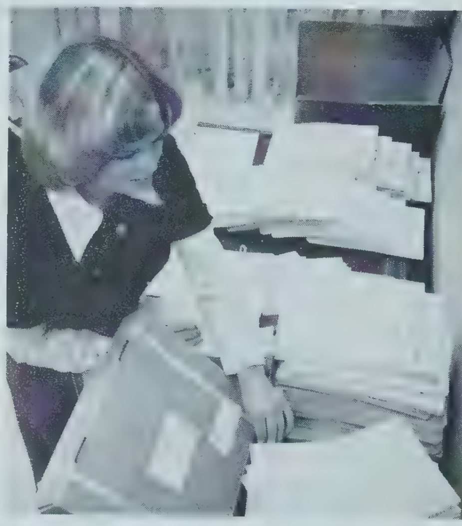
The applicants have also been requested to file a brief description of gathering facilities to supply gas to the proposed pipeline.

Girls behind the scenes

Audrey York and Sigi Schneider are barely able to touch the top of this stack of transcripts with their chinny-chin-chins. Rate hearing No. 7 produced 4,040 pages of transcript.



Although massive quantities of printing and copies for TransCanada's submissions are produced in the company's Printing Department, last minute changes to meet NEB requirements necessitates the use of a travelling photo copier. Here, Maria San Diego of Eng/Ops and Linda Lemm of Legal, put the copier to good use.

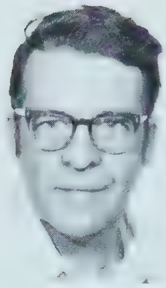


Before and after every National Energy Board Hearing, there's loads of packing and unpacking to do. Having returned from Ottawa, Betty Stevens of Legal carefully sorts out various documents for retention.

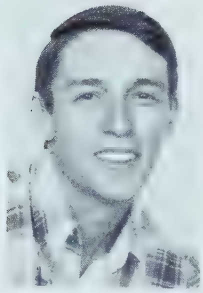
Siggy Schneider takes a moment out of her busy schedule to look at the view from the TransCanada work room in the Chateau Laurier Hotel. In the background is the Peace Tower on Parliament Hill.

Beverly Reynolds, Information Services Assistant, Calgary Office, checks TransCanada's submission as she prepares copy for an employee information bulletin to be relayed by telex to Toronto Office. Beverly reports on proceedings at the hearings and acts as press liaison for the Company.

Salute to SERVICE


N. S. Craig, Operations, Falcon Lake, August 1


K. A. McBride, Operations, Toronto, August 16


D. W. Hannan, Operations, Regina, September 8


Zvonko Rubesa, Engineering, Toronto, September 8


J. N. Fradette, Operations, Candiac, September 16


P. C. Wong, Engineering, Toronto, September 16


L. M. Inman, Infor. Ser. Toronto, September 21


G. W. Fidler, Operations, Portage La Prairie, October 1


Joan (Mrs.) Swain, Printing, Toronto, October 1

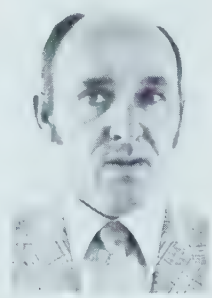

J. P. (Mrs.) Smith, I.P.E.L., Toronto, October 5

Fifteen Year


D. R. MacKay, Operations, Grenfell, August 16


B. F. Osztian, Gas Supply, Calgary, August 25


A. O. Schwartz, Operations, Western Area, August 26


Hans Frommer, Operations, Bracebridge, September 1


John Polmark, Operations, Toronto, September 1


D. J. Davis, Operations, Mattice, September 6


W. H. Hayner, Operations, Herbert, September 16


A. C. Schlaht, Operations, North Bay, October 3


S. G. Bussey, Operations, Herbert, October 24

Canada's northern natives Train for arctic pipeline

Canada's northern natives are proving that they have good learning capabilities and a natural aptitude to understand technical problems, according to Barry Virtue, manager of the Northern Petroleum Industry Training Program, known as Nortran.

TransCanada joined Nortran in May, 1974, and there are now four native trainees at Station 2, Burstall and four trainees at Station 13, Caron. In November of this year, an additional four northerners will join the staff at Station 25, Moosomin.

If approval is granted to build a natural gas pipeline from the Mackenzie Delta to the eastern Canadian markets, more than 100 northerners—most of them Indians, Metis and Eskimos—will be fully qualified for key jobs on the multi-billion dollar project the moment it gets under way.

Although limited to the number of workers who at present can be permanently employed by the oil and gas companies, enrollment will be greatly enlarged when the pipeline project is approved.

It is expected that about 400 northerners will eventually be trained for steady jobs in gas transmission, processing and exploration. The workers are guaranteed jobs in the industry whether a pipeline is built or not.

Companies backing Nortran include Alberta Gas Trunk Line, Gulf Oil, Imperial Oil, Shell Canada and TransCanada PipeLines. Both industry and government recognize the need to give northerners first chance at job opportunities in the North.

Many of the trainees were either unemployed or existing under harsh economic conditions as hunters and trappers.

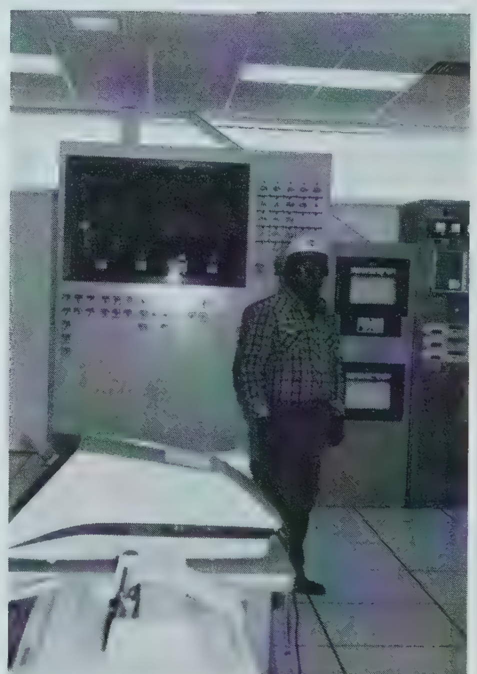
"Launching the scheme was at first a slow process," said Barry Virtue. "Native supervisor-counsellors spent considerable time in the northern communities explaining to the people the petroleum development plans and how, through training, they could participate."

"Many of the younger men and women had little experience with a wage-related economy. To move from their homes to other locations for training and employment was a difficult emotional decision to make."

Gradually, however, the idea caught on and in the qualifying process, the number of those willing to move south to petroleum operations or north to exploration sites in the Mackenzie Delta and Beaufort Sea justified setting up permanent training procedures.

"Those enrolled usually participate in a three-week orientation program sponsored by Canada Manpower and the Northwest Territories government at the Adult Vocational Training Centre at Fort Smith," Mr. Virtue explained. "Following this they are immediately assigned to actual on-the-job work with one of the companies.

"Each trainee works along-side an experienced worker. As he proceeds, a native supervisor-counsellor assists



With the Nortran program for almost three years is Rod Ferguson who is now located at TransCanada's Station 13, Caron.

him in understanding his job, in adjusting to new social and cultural environments and in helping him in personal matters."

During the past month, six members of TransCanada's supervisory staff have attended an Industry Supervisors Seminar at Yellowknife, Northwest Territories. As well as the objectives of the training program, the seminar covered the type of occupational training and evaluation programs to be used and the government's involvement in the programs.

Company representatives that attended this seminar included: Bill Bates, General Foreman and Dave Cavey, Sub-Foreman of Station 2, Burstall; District Manager, Lewis Kopp; Norm Bailey, General Foreman, Station 25, Moosomin; District Manager, Sid Lasage and Mike Petrow, District Manager, Station 41, Ile des Chenes.

Company representatives attended four previous seminars in 1974 held at Fort Smith, Northwest Territories, where the Training Centre is located.

With the company since the commencement of the Nortran program are northerners Maurice Minoza and Sam Gargan at Station 2, Burstall.

Sam Gargan, 27, who was born in a tent near Red Knife River, N.W.T., to a family of trappers, said that he finds his new work and environment very challenging and interesting. "It's quite a change from the North," declared Sam.

Maurice Minoza, 25, was born at Fort Providence, N.W.T., and previously worked in a fiberglas plant. He now hopes to become a district manager on the Arctic pipeline, when built.

Another trainee, Rod Ferguson, 35, now at Station 13, Caron, has been with the Nortran program for almost three years. Rod is originally from Keg River in Northern Alberta. He spent two years with Alberta Gas Trunk Line as a gas compressor operator.

Since joining TransCanada, Rod has been learning how to operate some of the machines and computers at the Caron, Saskatchewan compressor station.

"I have been asked if I would like to be transferred to another station, but I like the variety in my job here. My family is happy and everyone is very friendly to us—I would really hate to leave," said Rod.

When the Fergusons' home was completely destroyed by fire this summer, TransCanada, Nortran and the local town's people rallied to their aid with clothing and a new trailer.

Working out of Station 2, Burstall, are native trainees Ted Matto, left, and Sam Gargan. It is expected that about 400 northerners will eventually be trained for steady jobs in gas transmission, processing and exploration.

Clouded Future for Synthetic Natural Gas

The future role of non-traditional gas in meeting Canada's needs is very clouded, Edmund M. Foo, TransCanada's Manager of Energy Studies told the recent annual meeting of the Ontario Natural Gas Association in London, Ontario.

"If it is to play an important part in Canada's future, both industry and government need to roll up their sleeves and start to plan positively today," he said.

At present, Canada lacks definite progress by industry, even though the technology is available. "If industry is to undertake synthetic natural gas production on a large scale, it must have certain guarantees to be able to raise the huge amounts of capital required. Less critical, but still important, are co-operative intergovernmental policies and continued research efforts."

The growth of non-traditional gas stocks will depend very much on the availability of frontier gas supplies and their cost. "We face the decision today whether we should depend solely upon frontier gas for our future. If not, then we face a major challenge."

He told the meeting that coal can be an important base for the production of chemical feedstock, power generation and localized fuel use. High Btu coal gasification has the most potential for providing large gas supplies in the future.

Mr. Foo indicated that the gasification of petroleum liquids may fit certain marketing situations, but will not be a large factor in filling total demand. The product price of such gas is high, being extremely sensitive to new material costs.

Gas production from biological materials such as animal and plant waste would yield only small amounts for localized consumption, he indicated.

In discussing the use of plants as feed for the gasification process, Mr. Foo said that assuming a suitable crop could be found, large areas of land would be needed. Approximately 100,000 square miles would have to be planted to satisfy the present Canadian demand for natural gas of 2.8 Tcf per year. This is approximately five times the acerage of wheat normally planted in Canada.

Assisting Mr. Foo in providing the research of material necessary for this presentation was Clifford Taylor, an engineer in TransCanada's Energy Studies department.

cross country

CALGARY

Once the frost was off the fairways, the Annual Calgary Office men's golf tournament was under way. And before the afternoon was out, Barry Luft captured the coveted N. E. Tanner Trophy emblematic of the low net winner. There were other winners, and losers, too: Howard Mallabone, low gross; Art Wilkins, longest drive; Fayyaz Qureshi, high on hidden hole; A. Gerry Marshall, low on hidden hole; and Bob Wood, high gross.

It all started with a gourmet breakfast on the bus to Banff hosted by John Thorburn and Rick Beck.

Howard Mallabone, left, and Barry Luft show how to cover the golf course in style.

Bob Wood, left, and Hank Klassen compare right and left-handed clubs.

Ed Bozak, left, and Gerry Marshall relax between holes.

Lorne Larson tallies-up the scores.

The Mainliner Club at Calgary plans to hold a Centennial Party next month at the Wainwright Hotel at Heritage Park. The function is being organized by Maria Donaldson, secretary, and Jane Schroeder, technical clerk. As for costumes, Jane says, "Come in anything that has been worn in the last 100 years". This should give guests a fair scope and a great opportunity to celebrate Calgary's 100th Birthday.

In the women's inter-office softball competition of the Calgary Mainliner Club, the Transmitters defeated the TC Peelers.

The winning team, shown above—from the back row, left to right, included: Dorothy Van Es, team captain Nina Kryskow, Judy Mills, Val Turbull, Beverly Reynolds, Elsie Meier, Rita Qureshi, Alice Roest, Pat Fransen, Maria Donaldson, Adele Gowan and Mary King.

FALCON LAKE

The winners list at the Annual Station 45 Mainliner Golf Tournament included: Rory McLean (79), Bill Rae, Scott McLean, Don Urquhart, and Dennis Duggan, in the low gross category. Low net winners included: A Flight—Brian Fennel, Jack Gibson and Jack Salmon; B Flight—Gene Culleton, Cliff Wilson and Bob Mitchell; C Flight—Gord Gibben, Doug Johnston and Fred Evoy. The Ladies Division was won by Linda Evoy and Andrea Salmon.

The Tournament was followed by a barbecue and dance for the Falcon Lake employees and their wives and friends. The event attracted many visitors, including: Area Manager W. I. Wilson and Mr. and Mrs. Don Urquhart, Central Area; Marge and Don McLean and family, Western Area; Mike Petrow, Dennis Duggan and Bill Rae, District 41; and Kenora employees Ralph and Roxina Dean, Bob and Carolyn Mitchell, Cliff and Joan Wilson, Gene Culleton and Ron McRae.

Former TransCanada employee Nelson Peake recently received a bronze medal for bravery from the Royal Canadian Humane Association. In the spring of 1974, Nelson swam 160 feet in the frigid waters of the Blackwater River to rescue a 12-year-old boy at peril to his own life. Nelson's parents, Jim and Mary Peake of Sarnia, spent many years in Geraldton when Jim was foreman at Station 80. Jim is now Foreman at Station 502, Dawn.

HAILEYBURY

Werner Glinker handles the grill at Haileybury party.

The annual steak-fry was held at Foreman Bruce McCutcheon's house. Don Gourley of Ramore was a guest for the evening. This event is becoming very popular with Haileybury employees.

Winner of the Kenora golf tournament was Dennis Duggan, right, of Station 41, who is shown here being congratulated by Kenora Foreman C.I. Wilson.

KENORA

The Station 49 Golf Tournament drew 17 players to the Kenora Golf and Country Club on a frosty morning in mid-September. Each player received a prize and Station 41 employees Dennis Duggan and Bill Rae finished first and second with low gross scores of 87 and 94. C. I. Wilson, foreman at Kenora, reports that this tournament is drawing more contestants every year. A dedicated golfer does not worry about a little ice on the greens.

Bill Rae won second-prize in tournament.

RAMORE

The family picnic was held at Maud Lake and refreshments and races highlighted the afternoon program. The adults enjoyed a steak barbecue and dance during the evening in Matheson.

* * *

Station 105 employees: Dave McClenaghan, Vern Sopchyshyn, Bill Romak, Sam Bosnick and Al Jorstad, played in the John Barker Annual Golf Tournament at North Bay. The Ramore golfers did not report their scores but they did say they enjoyed the tournament.

Ramore employees charge the finish line during a wheelbarrow race at the picnic.

Mr. and Mrs. Paul St. Aubin and Evelyn Truax enjoyed the Station 105 steak barbecue.

Round Up

Calgary *Jill Halliwell* still leads the football pool with 42 games correct out of 59... *Fayyaz Qureshi* and wife, *Pat,* holidayed in Yellowknife, NWT where the trout fishing was unbelievable ... *George McNeely's* son, *James,* Dominion Junior Champion Ten-Pin Bowler, has been invited to attend an Alberta Government dinner to recognize Albertans of outstanding achievements ... Goodbye to *Gerry Rehwald,* Chief Gas Supply Engineer, who leaves TransCanada to join a Calgary private consulting firm ... *Guy Mallabone,* son of *Howard Mallabone,* is keeping up his Japanese lessons after spending 7 weeks in Osaka, Japan last summer under the Rotary International Youth Exchange ... *Tommy Eagle's* son, *Sidney,* plays first violin with the Calgary Youth Orchestra and is scheduled to accompany that group on a European tour in 1976. Sidney also plays piano, sax and clarinet ... *Charlie Taylor* is the proud manager of the Glamorgan Girls Midget Soccer Team who are now Provincial Champions after playing off in Edmonton. Daughters *Karen* and *Anne-Marie* are members of the team ... *Beverly Reynolds* of Information Services represented Calgary Office at a two-day conference sponsored by the University of Calgary on "The Economics of Oil and Gas Self-Sufficiency in Canada." ... *Bob Wood* is pursuing his hobby of scuba diving in the cold waters of Lake Minnowanka. His group have also been diving for a lost aeroplane in Ghost Lake.

Moosomin — The Moosomin-McAuley Blazers won the Manitoba senior baseball league title in Hamiota, Manitoba. Four employees were part of that team: *Ross* and *Terry Lynd, Brian Rose* and *Dale Lowes* ... *John Epp,* technician at Station 25, has been named President of the Moosomin curling club. John will replace *Ken Matheson* who had the position for four years.

Ramore — District Manager *Dave McClenaghan* was guest speaker at a recent meeting of the Matheson Rotary Club. Dave's son, *Jim* won first place in the Children's category at a local Turkey Shoot where turkeys were also won by 12-year-old *Bruce Cameron, Bob Boisvert* and *Dave McClenaghan* ... **Haileybury** — *Keith Ryan,* General Foreman, again takes on the challenging task of coaching a hockey team of five to seven-year-olds. Foreman *Bruce McCutcheon* is now past first principal in the Royal Arch Chapter, Masonic Order ... **North Bay** — District Clerk *Dennis Champagne* reports that Station 116 is now sporting a new landscaped exterior ... **Bracebridge** — *Paul Sprunt,* Utility, has had the opportunity to put his scuba diving expertise to good use — checking underwater lines at various river crossings ... **Maple** — *Frank McLean,* Maintenance, was first in the Eastern Area Golf tournament held in Huntsville, Ontario, and won second place in the Toronto Mainliner Club's golf tournament held at Rolling Hills golf course ... **Grafton** — Technician *Larry Quinton* was elected President of the Northumberland Aviation Council and has succeeded in getting the County of Northumberland to apply for federal aid for a local airport. *Jack McLean,* Utility, is President of the Grafton Legion and did an excellent job on a massive summer baseball tournament and beef barbecue ... **Candiac** — Congratulations go out to Foreman *Dan Hust* who won $5,000. in the last Olympic Lottery draw.

Toronto — A recent visitor to Toronto office was former Company solicitor, *John Ludgate.* Mr. Ludgate is now a Board member of the British Columbia Energy Board .... Executive Assistant *Dennis Brown* left for London, England in early November to discuss plans for the 13th Conference of the International Gas Union, which will be held in London, June 7-11, 1976. The 14th Conference will be held in Toronto May 27-June 1, 1979 ... Company Chairman and Chief Executive Officer *James W. Kerr* attended a meeting of the International Gas Union in Cracow, Poland in mid-October. Vice-President of the IGU, Mr. Kerr assumes the Presidency in June, 1976 ... Globe-trotter *Lou Etchegary* of Polar Gas returned recently from Moscow. Lou is a member of the joint Canada-USSR gas working group. In the past few months, Lou has presented papers at conferences in Fairbanks, Alaska and Memorial University in St. John's, Newfoundland. While in Russia, Lou visited Leningrad which he says has to be one of the most beautiful cities in the world ... Rates Manager *Bruce Escoffery* is now a gentleman farmer having acquired a 70 acre farm at Omemee, 75 miles east of Toronto ... Canvassers for the Industrial Division of the United Way campaign from Toronto office are *Jack Robinson, Ray Sim, Doug Jagges, Paul Zaludek, Bill Wall, Ken Whiteside, Ken Rubie, Dave Frost* and *Frank Donnelly.* Chairman of this Industrial section is Company President, *George W. Woods.*

MAPLE

District 130 employee Prem Syal, Maintenance, placed second in the men's singles division at the recent 'Oshawa This Week' tennis tournament.

Weekend Sailor Promotes Wayfarers

Senior Technician John Lilleberg is a weekend sailor who spends much of his free time promoting the Canadian Wayfarer Owners' Association. The Wayfarer is a family dinghy which is suitable for day sailing, cruising and racing. The Association has about 350 members and is the Canadian chapter of an international group.

While serving three years on the Association's executive, John edited and produced attractive brochures on the Wayfarer, edited the 1974 yearbook, and found time to race weekly at the Toronto Sailing and Canoe Club, on Lake Ontario west of Toronto.

During vacations John sails with his wife, Lynda, and their two children, three and six years-old, on Lake-of-Bays in northern Ontario. He said the Wayfarer is an ideal family sailboat because it is not expensive to buy and maintain, large enough for the family but not too large to tow behind a car, and best of all, it is both fast and safe. Wayfarer sailors from Europe and North America will meet in the 1976 World Championship races to be hosted by the Toronto club next summer.

TORONTO

Labor of Love—Although he's spent several months in Algeria on IPEL business during the past year, Corrosion Supervisor Raymond Bury finally finished his latest garden project—a project that took him two years to complete. Here, Raymond proudly stands in front of the goldfish pond and fern house with his two sons; Glen, 15, on left, and Warren, 14. Raymond estimates that he used 60 tons of rock, sand, gravel and cement to complete the rock projects in his garden which included a 20-ft. artificial river which he dug out and lined with boulders and pebbles, all cemented in place. The water-system is self-contained, being circulated by a pump. Adjacent to the pond is a fiberglas-covered patio. An opening party for the completed project in late September was attended by 63 people; including many of Ray's fellow employees.

TORONTO

Social Director Rosemary Von Uders kept the award presentations running smoothly.

"HAWAIIAN NIGHT"—Decorative palm trees and colorful leis set the mood for the Toronto Mainliner Club's Hawaiian Night dinner and dance in October at the Firefighters Club, on the outskirts of Toronto.

Nick Iannone of Rates putts the ball with some assistance from Murray Ross of Rates, crouching and Clifford Taylor of Sales.

Despite the rain, 132 golfers played in the 1975 Toronto Mainliner Club Golf Tournament held in mid-September at the Rolling Hills Golf and Country Club in Stouffville, north of Toronto.

In the men's event, Louis Kintzl of Eng/Ops won the low gross and Glen Smith of Treasury won the low net. Top woman golfer this year was Jean King of Personnel who won low gross while Bernie Delaney of Administration took low net. A most honest golfer award was presented to Lynda Glendinning, wife of Clare Glendinning, Purchasing.

Following the golf tournament, 233 persons attended the dinner-dance which also included the presentation of prizes. Emcee for the evening was Mainliner Social Director Rosemary Von Uders.

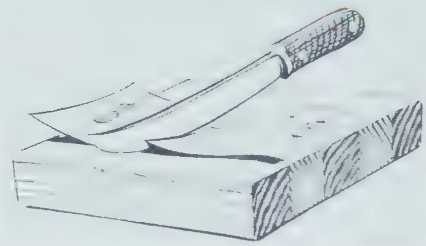
The smiling winners included, from left: Glen Smith, with the D.G. Clark trophy; Bernie Delaney with a Mainliner trophy; Jean King with the Ruth Wilson trophy and Louis Kintzl with the J.M. Blackwell trophy.

People In The News—

In This Area—These distinguished gentlemen are the Managers of TransCanada's three Areas and were recent visitors to Toronto Office for departmental discussions and to attend the management meeting. The smiling trio includes, from left: W.I. Wilson of Central Area, Irv Fee of Eastern Area and Denman Knox of Western Area.

Tennis Anyone? Hanlon's Point on the Toronto Islands was the site of the Toronto Mainliner Club's tournament in September. The winners in the photo above include, from left: Keith Jewitt, Eng/Ops, men's consolation winner; Hugo Marrello, Eng/Ops, men's singles champion; former company employee Carole Mervyn, ladies' singles champion; and Robert Heider of Sales, who together with Carole, won the mixed doubles championship. Arrangements for the tournament were handled by Tennis Club President Lloyd Cooke of Eng/Ops.

Cutting Kitchen Costs



One of the largest energy using rooms in a house is the kitchen according to the Canadian Gas Association which offers the following tips to ease the burden on the family energy budget. While these tips are aimed at gas ranges, they also apply equally to electric stoves.

Starting with your cooking range—the largest user of natural gas energy in the kitchen—you should use your oven whenever possible instead of the top burners. This will save energy because once the oven reaches the required heat it shuts off automatically and cooks with stored heat, while the burners are always on.

It's most economical to plan an all-oven meal: for example, a dinner of baked chicken, baked carrots, rice and baked apple crisp dessert can all be prepared at the same time. If you have several items that cook at different temperatures, select the average and remove each as it is done.

Preheating your oven can be wasteful. Items which require more than an hour to cook do not need a preheated oven. Use glass or ceramic baking dishes wherever possible as they transfer heat more efficiently than metal and allow you to set the cooking temperature lower.

Thaw frozen foods in the lower section of your refrigerator before cooking and if you are cooking a roast or fowl, turn off the oven about 30 minutes before it's finished—the heat which has built up in your oven will still do the job and save energy.

Buy pots and pans which have flat bottoms, straight sides and tightly fitting lids, and match the pot to the size of the burner—never allow the flame to lick up the sides. When cooking vegetables always cover the pot and don't drown the vegetables. A minimum amount of water will do the job in less time and make the vegetables taste better.

people

HELLO TO:

Allan, P. W., Eng/Ops, Toronto
Bracey, S. L. (Miss), Pipeline Facilities, Toronto
Bryant, R. A., Accounting, Toronto
Chandler, Darlene, Accounting, Toronto
For Chin, W. W., Eng/Ops, Compressor Design, Toronto
Haas, J. A., Maintenance, Eng/Ops, Maple
Jamieson, T. M., Polar Gas, Toronto
Jolin, I. Y. (Miss), Eng/Ops, Central Area
Klassen, H. P., Gas Supply, Calgary
Kormos, M. E., Eng/Ops, Facilities Planning, Toronto
LaCarte, R. E., Eng/Ops, Ramore
Lee, J. M., Accounting, Toronto
Lumsden, D. L., Gas Supply, Calgary
Mallabone, E. H. G., Gas Supply, Calgary
Marcon, V., Facilities Planning, Toronto
Marley, Ruth-Anne (Miss), Gas Supply, Calgary
Massey, D. R., Accounting, Toronto
Matthew, B. W., Eng/Ops, Ramore
McGonigal, A. G., Eng/Ops, Regina
Nose, H. M. (Miss), Accounting, Toronto
Palmberg, E. J., Eng/Ops, Toronto
Sedor, T. G., Eng/Ops, Toronto
Sellars, M. I. (Mrs.), Eng/Ops, Toronto
Senft, W. R., Eng/Ops, Herbert
Simmons, G. T., Eng/Ops, Cobourg

CHANGES – August

Craig, N.S., Maintenance to Utility, Eng/Ops, Falcon Lake
Fox, M. J., Maintenance to Utility, Eng/Ops, Ignace
Johns, W. D., Graduate Engineer to Engineer I, Polar Gas Project, Toronto
Landry, G. M., Maintenance to Utility, Eng/Ops, Bracebridge
McClure, R. F., Utility to Technician "M", Eng/Ops, North Bay
Simmons, G. T., Temporary Maintenance to Maintenance, Eng/Ops, Cobourg
Treleaven, L. E., Maintenance to Utility, Eng/Ops, Maple

September

Ferrari, F., Temporary Maintenance to Maintenance, Eng/Ops, Geraldton
Gelineau, A. F., Utility to Technician "M", Eng/Ops, Ancaster
Graham, R. A., Utility to Technician "M", Eng/Ops, Ramore
Marshall, A. F., Utility to Technician "E", Eng/Ops, Ancaster
Marshall, R. D., Temporary Maintenance to Maintenance, Eng/Ops, Maple
Martell, D. J., Temporary Maintenance to Maintenance, Eng/Ops, Falcon Lake
McQuillan, D., Temporary Maintenance to Maintenance, Eng/Ops, Bracebridge
Moroz, M. A., Temporary Maintenance to Maintenance, Eng/Ops, Geraldton
Scott, N., Temporary Maintenance to Maintenance, Eng/Ops, Maple
Shawera, E., Utility to Technician "E", Eng/Ops, Mattice
Smith, E. C., Utility to Technician "M", Eng/Ops, Ancaster
St. Aubin, P., Utility to Technician "M", Eng/Ops, Ramore
Walker, J. G., Supervisor, Cost Estimating, Polar Gas Project, to Assistant Supervising Engineer, Eng/Ops, Administration, Toronto
Walsh, J. E., Utility to technician "E", Eng/Ops, Geraldton
Yen, H., Engineering Trainee to Graduate Engineer, Polar Gas Project, Toronto

GOODBYE TO –

August

Belanger, M. E. (Mrs), Polar Gas Project, Toronto
Fransen, P. I. (Miss), Gas Supply, Calgary
Gowan, A. M. (Mrs), Gas Supply, Calgary
Kappi, L. (Miss), Polar Gas Project, Toronto
Kidd, W., Eng/Ops, Cobourg
Matthews, L. A. (Miss), Legal, Toronto
McGonigal, W. G., Eng/ops, Ramore
Miller, R. S., Accounting, Toronto
Senkow, S., Eng/Ops, Falcon Lake
Speers, R. L., Eng/Ops, Regina
Westhaver, C. J. (Miss), Eng/Ops, Toronto

September

Angus, J. L. (Miss), Gas Supply, Calgary
Beaulieu, L. P., Eng/Ops, Maple
Boock, S., Eng/Ops, Ramore
Davidson, R. W., Eng/Ops, Moosomin
Edmondson, C. E. (Mrs.), Polar Gas Project, Toronto
Ferrari, M. J. (Mrs.), Accounting, Toronto
Gibson, H. J. (Miss), Eng/Ops, Toronto
Iwanowski, A., Eng/Ops, Candiac
Landon, W. A., Legal, Toronto
Lewis, H. (Mrs.) Gas Supply, Calgary
McPherson, J. M., Eng/Ops, Toronto
Sandor, J., Eng/Ops, Toronto
Simmonds, D. J., Eng/Ops, Regina
White, S. C., Eng/Ops, Maple
Wilson, S. C. (Miss), Legal, Toronto
Wong, W. (Mrs.), Accounting, Toronto

Clark Appointed Vice-president

D.G. Clark

Donald G. Clark has been appointed Vice-President, Administration for the Polar Gas Project.

In his new position, Mr. Clark will administer and coordinate the legal, personnel and office administration functions for Polar Gas.

Mr. Clark was formerly the Project's Manager, Administration.

BIRTHS:

Kolodrupski, J. M., Eng/Ops, Western Area, girl, Joanna Lyn, July 21
Pigeau, K., Eng/Ops, North Bay, boy, Bradley, August 24
Sawinski, L. G., Eng/Ops, Cornwall, girl Lara Lee, July 21
Tso, Peter, Eng/Ops, Toronto girl, Anita Joy, September 25

MARRIAGES:

Arnam, M. H., Eng/Ops, Thunder Bay, July 19
Fletcher, H. W., Accounting, Toronto, August 22
Goodwin, G. E., Eng/Ops, Geraldton, July 19
Mathies, C. H., Eng/Ops, Herbert, September 22
McLean, J. D., Eng/Ops, Grenfell, August 23
Pritchard (nee Salt), Pamela, Eng/Ops, Toronto, August 8

Appointments


Trevor Albone


G. H. Collins

Company Chairman and Chief Executive Officer James W. Kerr made the following appointments on October 30, 1975:

Trevor Albone was appointed Executive Assistant to the Vice-President of Engineering and Operations. Mr. Albone joined the Company in 1957 and has wide experience in Engineering and Operations activities. In May 1974 he was appointed Vice-President and General Manager of our wholly-owned subsidiary, International PipeLine Engineering Limited.

The intimate involvement of TransCanada PipeLines in the planned transmission of natural gas from frontier areas requires close liaison with Canadian Arctic Gas. Mr. Albone will represent TransCanada on the newly formed Technical Operating Committee of CAGPL and will devote much of his time to its work. In addition, he will carry out varied assignments within the Engineering and Operations Department.

G. H. Collins was appointed Vice-President, Administration of International PipeLine Engineering Limited. In this capacity he will be responsible for the contractual, administrative and financial aspects of IPEL operations. IPEL will continue its participation in Concanal and will seek selected projects in Canada and overseas that will utilize TransCanada's expertise.

Mr. Albone and Mr. Collins will report to R. D. Walker, Vice-President, Engineering and Operations.

Heating System should be checked

Now is the time to check your heating system to ensure clean, even heat all through the chilling months that lie ahead.

Your gas furnace is fully automatic. Adjustments have been carefully made by the manufacturer and should not be changed except by a qualified serviceman. However, there are several simple checks you can do yourself that may save you a service call later on. A few minutes budgeted for a visual inspection, cleaning and minor do-it-yourself repairs will save you energy, inconvenience and money. Keep your instruction manual handy and read it over from time to time.

It is a wise precaution to have your furnace cleaned each year by a qualified maintenance man. This should be done each fall, as most heating accidents are most likely to happen during the winter months when your home is tightly sealed and your furnace is working to full capacity.

The greatest cause of inefficiency in a heating system is lack of cleanliness. Good housekeeping certainly pays off in fuel savings.

Air filters are inexpensive but very important to furnace effectiveness. They should be changed or cleaned once a month during the heating season. It is a wise precaution to turn off the power to the furnace blower before replacing filters.

Check to see if your fan motor is running properly and that the fan belt is in good repair. Clean and lubricate the fan motor but be sure to use no more than one or two drops of a good grade SAE20 oil. The motor should be lubricated every 5000 hours of operation.

Your chimney is the escape route for the products of combustion. It must be kept clean and this can be checked by holding a hand mirror inside the chimney at the clean-out opening or at the lowest pipe vent connection to check for obstructions.

In most cases your furnace will start and operate with no problems if you properly maintain it, however, if it doesn't, forget being a do-it-yourselfer and call a qualified serviceman.

along the line

TransCanada PipeLines

Correspondents
Calgary – Marnie Drinnan
Burstall – Lorna Schick
Cabri – Pat Quinn
Herbert – William Harding
Caron – Doug Yates
Grenfell – Larry and Marie McAuley
Moosomin – Terry Redfern
Rapid City – Mildred Stanick
Portage la Prairie – Marian Ostenfeldt
St. Boniface – Gail Keast
Falcon Lake – Gordon Elder
Kenora – Brian Hunt
Dryden – Jack Wright
Ignace – Barbara Neale
Upsala – Susan McIntosh
Thunder Bay – Phil Emms
Nipigon – Eini Rathje
Geraldton – Aksel Johnson
Hearst – Anna Vanderlip
Mattice – Ronald Begin
Smooth Rock Falls – Robert Tremblay
Ramore – Barbara Cameron
Haileybury – Neil Sheppard
North Bay – Joseph Williams
Bracebridge – Paul Sprunt
Maple – Richard Sampson
Ancaster – Aubrey Marshall
Cobourg – George Crumback
Kingston – Gerry Huurman
Candiac – Jim Fradette

Published for the employees of TransCanada PipeLines and their families by the Information Services Department.
Editor: Conrad B. Tucker
Assistant Editor: Lee M. Inman
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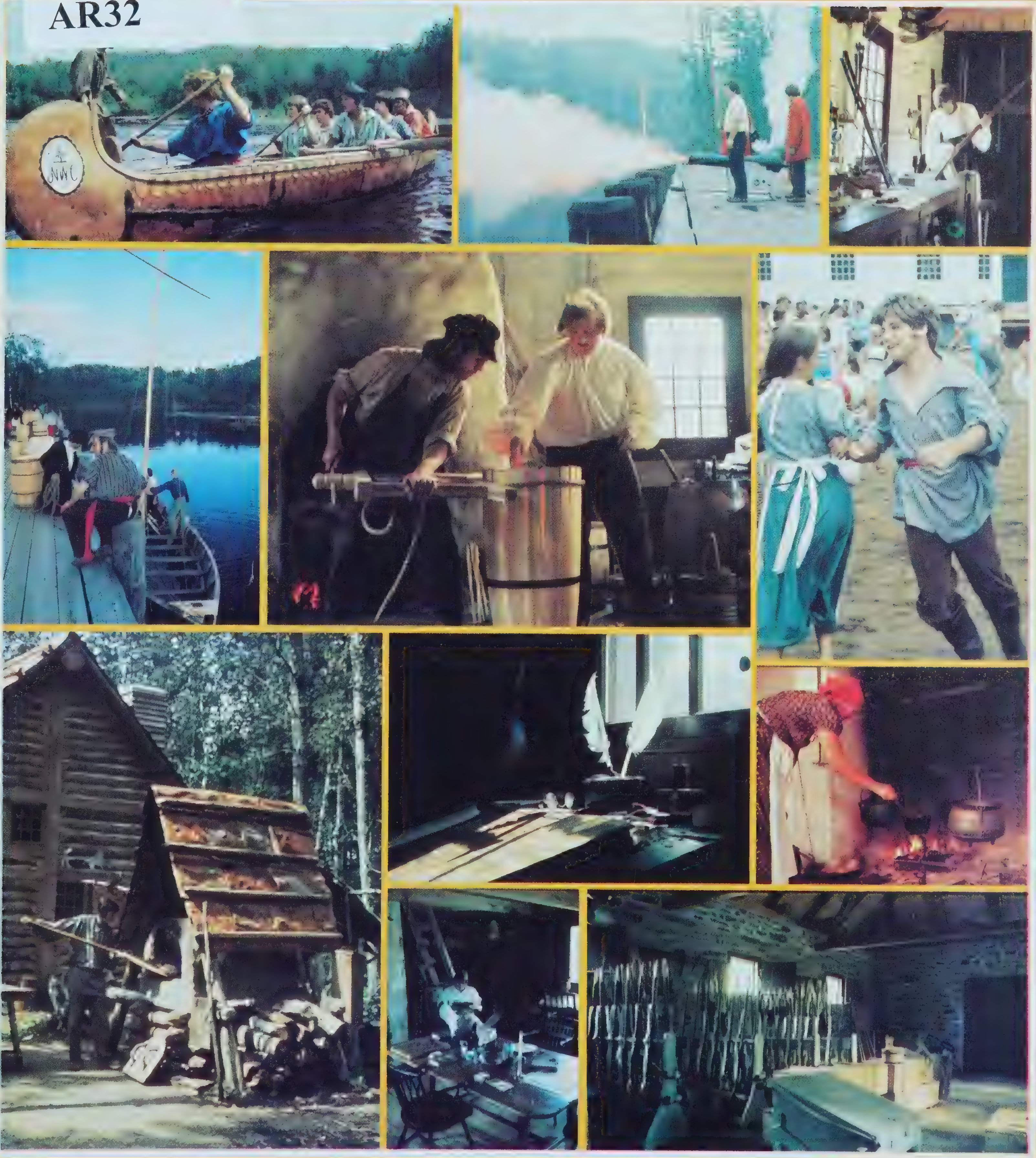
Member
International Association of Business Communicators

Station 119, Sundridge, Ontario is now completely landscaped, making an attractive addition to the scenery for motorists travelling on Highway 11 through this part of Northern Ontario.

along the line

JUNE, 1979



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Ile des Chenes - Bohdan Bodnar
Falcon Lake - Gordon Elder
Kenora - Art McMillan
Ignace - Ed Hipfner
Upsala - Corrine Donovan
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Front Cover
Scenes from summertime activities at historic Old Fort William, located in Thunder Bay, Ontario, mid-way on TransCanada's pipeline.

Published for the employees of TransCanada PipeLines and their families by the Public Affairs Department.

Publications Supervisor: **C. B. Tucker**

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Member International Association of Business Communicators

OLD FORT WILLIAM GETS ANOTHER LEASE ON LIFE

Canada celebrated its 112th birthday as a nation during the week of June 25th to July 1. Celebrations took place in more than 1,500 Canadian communities, sponsored by the Council for Canadian Unity and the Canadian Folk Arts Council.

Along The Line hopes its readers will agree that one way to mark a country's birthday is to reflect on its past.

For this reason, the following feature is on one of Canada's historic sites, Old Fort William, located in Thunder Bay, mid-way on the TransCanada pipeline. Thunder Bay is also the location of company Compressor Station 68 and TransCanada's Central Area office.

Too many historic sites are about as exciting as watching paint dry, but you'd never leave this place in yawns.

It's Old Fort William, a $12 million recreation of the North West Company's fur trading hub in the lusty days of the voyageur — presented live.

Certainly this newly completed northern Ontario visitor attraction — nearly five years in construction — recaptures the most colorful era of Canada's past, but don't look for an on-site location, even in this rugged land 900 miles north-west of Toronto.

For to have put it once again where it was in 1803 would have meant displacement of homes, industry and a vital railway yard in the first settled section of town.

The Fort instead was re-established along the same voyageur route of the Kaministikwia River, nine miles upstream from the original site amid forested surroundings more in keeping with the times.

You get thumbnail facts and a coded map of the 10-acre site before viewing an audio-visual briefing. Then you're ready for a tour of the grounds, on your own or led by a tour guide.

One of the most imaginative restorations you'll see anywhere, the Fort's fifty-odd structures have been masterfully executed from paintings, sketches, and documents of the period.

But as great as the buildings may be, the real show stealers are the summer students and local regulars who staff them. In costumes of the day and speaking always in the present tense, they quickly make visitors feel like they too are part of the act.

There's "Doctor McLoughlin," stroking his beard and describing with tutored erudition the emetics and other balms on his dispensary shelf.

Lowering his steel-rimmed spectacles, he grimaces at the suggestion of a visitor who thought that the nemesis of the voyageur might have been tuberculosis — a word yet to be invented for a malady known only in the 19th century as "consumption."

When you pass through the main gate of Old Fort William, you enter 10 acres of adventure.

"That's a new one on me, sirr," he responds with a scolding burr. "One of the real killers is hernia — and there's not a damn thing we can do for that."

There's more action next door in the recovery ward, where a lonely attendant regrets he can't introduce his only remaining patient because he died just minutes before.

Even the haughty company partners get into the act in their high top hats and cut-away coats and carrying swagger sticks as they stroll through the grounds each afternoon behind a Scottish piper.

It's a fun visit to Old Fort William, as it must have been for the more than 2,000 voyageurs who gathered there for the Great Rendezvous each summer, following months of trading that took them clear across Canada and into the sub-Arctic.

But they didn't live long, seldom making it to 35 or 40. Although canoe travel was always fraught with danger, hernia was the real occupational hazard—and small wonder. By company order, the voyageur had to be about the size

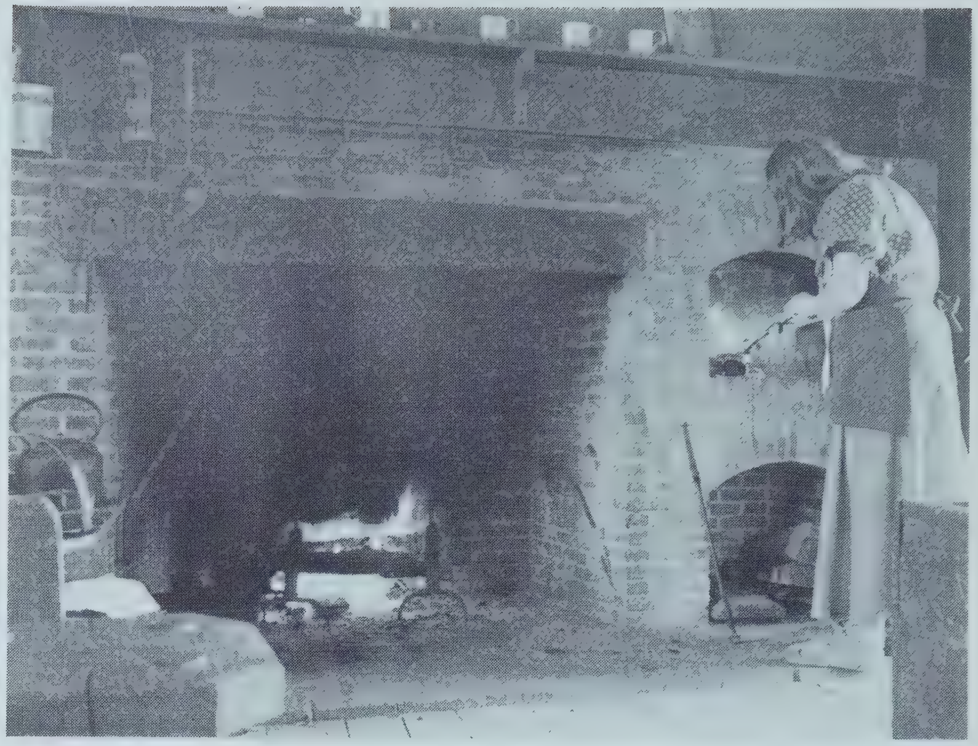
and weight of a steeplechase jockey, five feet two and 130 pounds. Yet he was expected to tote 90-pound bales on countless portages.

Smallness was mandatory, since big guys tended to tip the canoes despite their awesome 24-36 foot length, which took a crew of 8-10 to paddle them. Moreover, little guys made more room for a 3,000 pound cargo plus the company partners who often accompanied them on the journey.

The voyageurs were allowed inside the palisade only to buy at the canteen, trade, or have repairs made to their battered canoes. But they didn't care.

Upon their arrival, temporary voyageur and Indian encampments sprang up outside the palisade and the assembled masses plunged into a wild round of games and celebrations.

Meanwhile, back in the Fort, you can witness a heated trade transaction going on in the Council House, listen to the lively tunes of the Fort's fiddler, sample fur trade cuisine in the Canteen, or watch a kicking, screaming felon being herded to the jail.



A visit to the kitchen will spark a love affair with history.

You can watch big cargo canoes being built, wander into the artisans' (carpenter, cooper, tinsmith, blacksmith, tailor, and armourer) shops, the naval shed, Boucher's cabin, the kitchen, the stores buildings, the Native encampment, or just settle for patting a farm animal in the agricultural complex outside the main palisade.

Whatever you see here sparks a love affair with history and an admiration for those tough little guys with paddles, as bad and brawling as they were.

You can watch barrel making in progress.

Skilled craftsmen show the ageless craft of blacksmithing.

Robert G. Wall, left, President of Great Lakes Gas Transmission Company and General Chairman of the Detroit portion of the Freedom Festival, with American Natural Resources' Audrey Farley and Donna Rust and Walter R. Green, Festival Vice-Chairman.

'FREEDOM FESTIVAL' a Two-Nation Party

Pipeliners are known to enjoy a good party, but Great Lakes Transmission's Number One pipeliner, President Robert G. Wall, is in charge of a party where the guest list is in the millions.

The party is the International Freedom Festival held each year in Detroit and Windsor since 1959 to mark Canada's July 1 birthday and the American July 4 Independence celebrations. Mr. Wall, a former Vice-president of TransCanada, is acting as General Chairman of the Detroit portion of the festival for the second year in a row.

Celebrations run from June 29 to July 4 and feature such events as a regatta, moonlight cruises, an international tug boat race from Detroit's Fort Wayne to Windsor's Dieppe Park, concerts, parades, ethnic festivals, a marathon and even Frisbee clinics. The now-famous Great Bed Race is held during the festivities as teams push decorated beds down Windsor's Ouellette Avenue in a race for the title of International Freedom Festival Great Bed Race Champ.

The most visually spectacular event is one of the continent's biggest fireworks displays which lasts one hour and includes rockets, starbursts,

John F. Kennedy, Ottawa, 1961:

"Geography has made us neighbors. History has made us friends."

whistling bombs and other dazzling explosives fired from barges anchored in the Detroit River.

The concept of the festival originated with the Michigan Secretary of State's Office and was quickly adopted by business and government leaders on both sides of the border. The original idea called for a series of celebrations spread throughout both Michigan and Ontario, but because of difficulties in coordinating the events it was decided to focus on the Detroit - Windsor area.

The festival is aimed at highlighting the unusual relationship between Canada and the United States whose border continues to be the longest undefended national boundary in the world.

The Freedom Festival was first held 20 years ago to dramatize the warm friendship between the Canadian and American people "and to publicize this friendship as a worldwide example of the benefits derived under the governments".

To mark the festival, the Freedom Award is presented annually to individuals who have made a "distinguished contribution to the cause of world peace and friendship". The presentation is held alternately in Windsor and Detroit and has included such winners as Lester B. Pearson, the Gordie Howe family, John F. Kennedy and Martin Luther King. This year's presentation will be made in Windsor.

Mr. Wall said the Freedom Festival is a unique idea "where two nations can have fun together and as a Canadian I'm proud of the festival."

The Detroit Renaissance Foundation, which promotes cultural events in downtown Detroit, has agreed to act as the permanent staff of the festival.

"Now we'll be able to make long-range plans and commitments, " Mr. Wall said. "In the past the festival has been put on by volunteers from business, labor, government and civic groups. We'll still need volunteers to give the Foundation a broad base. However, the addition of permanent staff will give us some year to year continuity."

The strong support of the people of Windsor and Detroit has made the Freedom Festival one of the great celebrations on the continent. This year's events will also feature jazz bands roaming downtown Detroit, Canadian parachutists in the precision drop over Detroit River, collective ringing of Detroit church bells and a bagpipe concert by the Windsor Police Band to lead off an international baseball game between the Detroit Tigers and the Toronto Blue Jays.

When the fireworks begin over the international boundary there will be the sounds of cheers and laughter as two nations celebrate their freedom and friendship.

The Great Bed Race rattles through downtown Windsor.

Riders lead a parade through Southwest Detroit.

Runners compete in the Belle Isle marathon.

Former Canadian energy minister Donald S. Macdonald, now of McCarthy and McCarthy, was a featured speaker at IGU Conference.

14th World Gas Conference was a resounding success

The 14th World Gas Conference and Gas Industry Exhibition held in Toronto May 27 to June 1 was a resounding sussess with more than 2,300 delegates attending.

The delegates were welcomed by James W. Kerr, Chairman and Chief Executive Officer, TransCanada PipeLines and President, International Gas Union. Mr. Kerr was the first Canadian President of IGU and this was also the first time the World Gas Conference has been held in Canada.

The Conference was officially opened May 28th at the O'Keefe Centre by Ontario Premier, The Honourable William G. Davis, and the Gas Industry Exhibition at the Toronto Harbour Castle Hilton Convention Centre later in the day by Mitchell Sharp, Commissioner of the Northern Pipeline Agency.

More than 100 companies and Associations from the 36-member countries of the IGU displayed and demonstrated gas industry state of the art equipment and technology.

The Royal York Hotel was Conference headquarters where the bulk of the business was conducted.

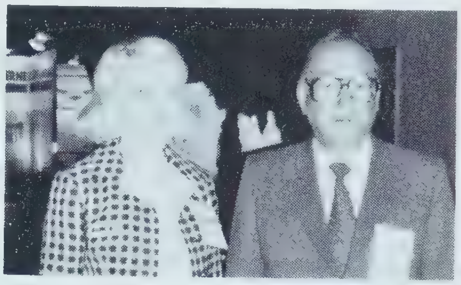
Sixty-six technical papers were presented during the Conference by 134 authors representing 22 nations.

As well, three theme papers and two national papers were presented. Various technical tours and social events were well attended.

Another highlight of the Conference was the International Colloquium About Gas Marketing—the 43rd meeting of the Colloquium.

The President-elect of the International Gas Union for the next three years is Eric Giorgis, Administrateur Deleque Compagnie Industrielle et Commerciale du Gaz, S.A., of Vevey, Switzerland. His country will host the 15th World Gas Conference in 1982.

The objective of the IGU is the exchange of technical information and recording of the progress of the gas industry internationally. The Canadian Gas Association represents Canada in the organization.


Visitors to the TransCanada booth at the Gas Industry Exhibition were TransCanada Director Frank A. Schultz and Mrs. Schultz.


'Mitchell Sharp, Commissioner of the Northern Pipeline Agency, uses blow torch to cut ribbon opening the Gas Industry Exhibition, under watchful eye of IGU President James W. Kerr.


At the press conference following IGU opening ceremonies are are: E.C. Bovey, Ontario Premier William G. Davis and James W. Kerr.

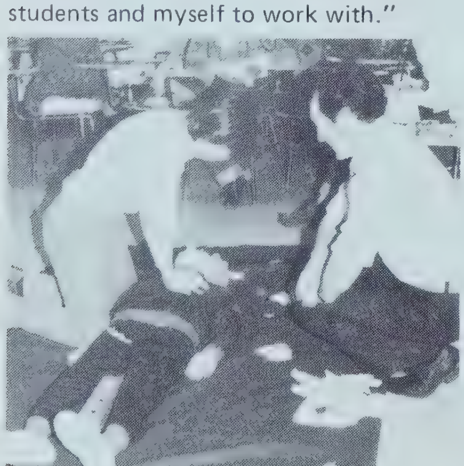
First-year nursing students take the cardio-pulmonary resustitation course.

Safety Supervisors teach at U of T

The University of Toronto's Faculty of Nursing recently had TransCanada's assistance in teaching the CPR (Cardio-pulmonary resuscitation) course to first-year nursing students.

Company Safety Supervisor S. C. Foster and Eastern Area Safety Supervisor D. J. Haworth were praised for their assistance in a letter from L. Joan Brailey, Assistant Professor.

"The use of your practice manniquins and the donations of the time of Mr.Sam Foster and Mr. Don Haworth were truly appreciated. Sam and Don were knowledgeable and enthusiastic teachers. They were a pleasure for both the students and myself to work with."



Sam Foster watches student's technique.

Bill Dillon with a portion of the 18,000 binders completed for the Gas East Project's application.

Plans to accelerate development of gas off Sable Island

On June 19,TransCanada PipeLines made public a plan to accelerate the development of newly discovered natural gas deposits off Sable Island.

The natural gas transmission company issued a report to the Province of Nova Scotia covering the development plan.

"The flexibility of TransCanada's Gas East Project, previously filed with the National Energy Board, allows the incorporation of new Atlantic energy resources at an early date," stated TransCanada's Chairman and Chief Executive Officer, James W. Kerr.

The report studies the possibility of bringing Sable Island gas on shore initially as a refrigerated, condensed rich gas in liquid form under moderate pressure. When suitable threshold gas reserves are established, an offshore pipeline would be constructed.

Transportation of the condensed rich gas by a marine shuttle vessel for processing on shore would permit the Sable Island resources to be developed at the earliest possible date. This could prove the first step in the development of other offshore Nova Scotian gas resources and of such future receiving terminals as Canso. Also, this concept could be applicable to the development of hydrocarbons obtained from offshore Newfoundland and Labrador.

In addition, it would also provide the Atlantic provinces with secure domestic gas energy in the most economic manner and at an early date. Employing Atlantic Canada's industrial, manufacturing and maritime capabilities, this development would improve the economic situation of the entire region.

The current proposal based on the recently announced additional natural gas discovery at Sable Island is fully compatible with the Atlantic dimension of TransCanada's Gas East Project, which advocates initial development of the Atlantic markets for gas energy with propane, followed by or supplemented with other forms of gas energy at a subsequent date.

The project would include a natural gas pipeline from Canso to Maritime markets. It would make unnecessary a decreasing diameter pipeline which is proposed to move western Canadian gas from Quebec City to the Maritimes.

CANADA POST –
METRIC RATES

The Government announced late December 1978 that they will use metric postal rates commencing July 1, 1979.

It should be remembered that new postal rates came into force on April 1, 1979. Thus the new metric rates published take into account the new rates.

For your general information, here are some of the new rates.

DOMESTIC RATES

FIRST CLASS		THIRD CLASS	
0 – 30 g	17¢		
30 – 50 g	26¢	0 – 50 g	15¢
50 – 100 g	38¢	50 – 100 g	23¢
100 – 150 g	56¢	100 – 150 g	31¢
150 – 200 g	74¢	150 – 200 g	39¢
200 – 250 g	91¢	200 – 250 g	47¢
250 – 300 g	109¢	250 – 300 g	55¢
300 – 350 g	127¢	300 – 350 g	63¢
350 – 400 g	144¢	350 – 400 g	71¢
400 – 450 g	162¢	400 – 450 g	79¢
450 – 500 g	180¢	450 – 500 g	87¢
(LETTERS)		(GREETING CARDS)	

U S RATES

LETTER RATE
(INCLUDING POSTCARDS)

0 – 30 g	17¢	250 – 300 g	140¢
30 – 50 g	30¢	300 – 350 g	170¢
50 – 100 g	47¢	350 – 400 g	195¢
100 – 150 g	72¢	400 – 450 g	220¢
150 – 200 g	96¢	450 – 500 g	245¢
200 – 250 g	121¢	500 – 1 kg	391¢

AIRMAIL - AEROGRAMMES - 35¢ each

LETTERS & POSTCARDS

0 – 20 g	35¢
20 – 50 g	63¢
50 – 100 g	84¢
100 – 250 g	160¢
250 – 500 g	308¢

AIR

PRINTED PAPER & SMALL PACKAGES

0 20 g	27¢
20 – 50 g	45¢
50 – 100 g	66¢
100 – 250 g	119¢
250 – 500 g	216¢

METRIC BAKING TEMPERATURES

Product	Oven Temperature	Time (Minutes)
Bread, etc.		
Cream Puffs, Popovers	200°C	45 – 50
Muffins	200° – 220°C	20 – 25
Quick Breads	180° – 190°C	60 – 75
Tea Biscuits	220° – 230°C	10 – 15
Yeast Bread	200°C	30 – 40
Yeast Rolls, plain	200°C	20 – 25
Yeast Rolls, sweet	190°C	20 – 30
Cakes with Fat		
Cup	180° – 190°C	15 – 25
Layer	180° – 190°C	20 – 25
Square, rectangle	180°C	45 – 60
Chiffon Cakes (tube pan)	170° – 180°C	50 – 60
Fruit Cakes	130° – 140°C	3 hours *
Cakes without Fat		
Angel and Sponge (tube pan)	170° – 180°C	50 – 60
Cookies		
Drop	180° – 200°C	8 – 15
Rolled	190°C	8 – 10
Egg, Meat, Milk and Cheese Dishes		
Cheese Soufflé, Custards (baked in a pan of hot water)	180°C	30 – 60
Macaroni and Cheese	180°C	25 – 30
Meat Loaf	180°C	60 – 90
Meat Pie	200°C	25 – 30
Rice Pudding (raw rice)	150°C	120 – 180
Scalloped Potatoes	180°C	60
Pastry		
Two-Crust Pie		
cooked filling	220°C	25 – 35
uncooked filling	220°C	15 – 20
then reduce heat to	180°C	30 – 40
Single-Crust Pie		
uncooked filling	230°C	10 – 15
then reduce heat to	180°C	25 – 35
Pie Shell	220°C	12 – 15
uncooked filling	180°C	12 – 15
in prebaked shell	Or 220°C	For 4 – 4-1/2
Tarts		
cooked filling	220°C	12 – 15
uncooked filling	190°C	20 – 25
shells	220°C	10 – 12
Sausage Rolls	220°C	10 – 12

* Approximately

People in the News

Cameron elected Chairman Canadian Gas Association

James M. Cameron, Executive Vice-President, TransCanada PipeLines, Toronto, was elected Chairman of the Canadian Gas Association at the 72nd CGA Annual Meeting in Toronto.

He succeeds Egerton W. King, President and Chief Executive Officer, Northwestern Utilities Limited, Edmonton, and Canadian Western Natural Gas Co. Ltd., Calgary.

Other CGA officials elected were R. E. Kadlec, President, Inland Natural Gas Co. Ltd., Vancouver, First Vice-President; J. J. Leroux, Chairman of the Board, Northern and Central Gas Corporation Limited, Toronto, Second Vice-Chairman. Mr. King remains on the Board as a Director and Immediate Past Chairman, and W. H. Dalton remains as President and Chief Administrative Officer and a Director of the Association.

In 1966 Mr. Cameron joined TransCanada PipeLines as an executive assistant. In 1967 he became General Counsel and in 1968 Vice-President and General Counsel. In 1972 he was appointed Group Vice-President and in April 1975 was appointed Executive Vice-President. He was elected a Director of the company in 1977.

Mr. Cameron told delegates at the 72nd Annual Meeting that he was looking forward to his year as Chairman of the Canadian Gas Association. "We are on the threshold of an exciting and challenging new era in our history. I expect many important decisions will be forthcoming during the coming year and have complete confidence in our membership, our committees and in our CGA staff to meet these challenges effectively and efficiently."

Mr. Cameron is a native of Turner Valley, Alberta. He is a Director of Great Lakes Gas Transmission Company, The Royal Trust Company, TransCanada PipeLines and the Canadian Gas Association. He is a member of the Canadian Bar Association.

Great Lakes Appointments

Great Lakes Gas Transmission Company announced on June 21, that William E. Kohr will become Vice-President, Operations, effective July 1. Kohr replaces R. D. Milam who was named to the newly created position of Vice President and Assistant to the President prior to his retirement December 31, 1979.

Great Lakes is an interstate gas pipeline which transports Canadian gas from the international border at Emerson, Manitoba, through Minnesota, Wisconsin and Michigan. The Company is jointly owned by American Natural Resources Company of Detroit and TransCanada PipeLines Limited of Toronto.

Kohr presently serves as Assistant Secretary and Assistant Counsel for American Natural's subsidiary, Michigan Wisconsin Pipe Line Company. Since joining the American Natural Resources System in 1960, Kohr has served in numerous positions, including engineering, labor relations, land and taxes and legal counsel. He received a Bachelor of Engineering degree from Yale University and earned his law degree from Wayne State University.

R. D. Milam

W. E. Kohr

Milam has been in charge of pipeline operations for Great Lakes since its inception in 1967. He has some 44 years experience in the interstate pipeline business, including 11 years work with Michigan Wisconsin prior to joining Great Lakes. He earned a B.S. degree from the University of Kansas and has completed graduate work at Harvard, the University of Wisconsin and Wayne State University.

Great Lakes President, Robert G. Wall said he plans to draw upon Milam's years of experience to assist him "as we prepare to meet the gas supply challenges of the next decade." Nothing his wide range of engineering and legal experience, Wall welcomed Kohr to Great Lakes as "an individual with varied experience and broad business skills, who will add additional depth to the Company's management team."

Beddome Appointed Company Vice-Chairman

At a meeting of the Board of Directors on June 18, 1979, John M. Beddome was appointed Vice-Chairman of the Company.

Mr. Beddome is Senior Vice-President, Dome Petroleum Limited, and has had extensive experience in the oil and gas industry in Gulf Canada Limited and Gulf Oil Corporation. He has been with Dome since 1971, with responsibility for co-ordination and development of major projects, and more recently with full responsibility for oil and gas operations.

Mr. Beddome was elected a director of TransCanada PipeLines on October 4, 1978.

James W. Kerr, was requested by the Board to remain as Chairman and Chief Executive Officer of the Company until September 30, 1979, which is six months after the normal retirement date.

At the June 18 meeting, the directors confirmed that the executive offices of the company will continue to be located in Toronto and there will be no significant transfer of company personnel now located in Toronto offices to the Calgary office.

John M. Beddome

Kerr elected 'Fellow' by Engineering Institute

At the Awards Dinner of the Engineering Institute of Canada's Annual Congress on May 14th, Company Chairman and Chief Executive Officer James W. Kerr was elected to the grade of Fellow of the Engineering Institute of Canada.

Robert Thibault, General Manager of the Engineering Institute said that in electing Mr. Kerr to the grade of Fellow, the Institute wished to give due recognition to his excellence in engineering and his contribution to society in general.

Mr. Kerr now has the privilege to use the initials F.E.I.C. after his name as evidence of the honor conferred upon him by the Institute and its Constituent Societies.

James W. Kerr holds his "Fellow" award from The Engineering Institute of Canada.

John G. Frank

Great Lakes Appointment

John G. Frank has been elected Vice-President, Engineering for Great Lakes Gas Transmission Company. Mr. Frank will be in charge of all engineering activities, including pipeline and compressor station design, for the Detroit based interstate natural gas pipeline. His new responsibilities will emphasize planning and project control to achieve energy conservation through the most efficient use of company facilities.

Mr. Frank joined Great Lakes in 1969 after a 22-year career with the American Natural Resources System headquartered here. Great Lakes is jointly owned by American Natural and TransCanada PipeLines Limited of Toronto. The company transports Canadian produced natural gas from western to eastern Canada via the upper Great Lakes states and also sells substantial volumes of gas to United States utilities.

Mr. Frank, a resident of Dearborn, Michigan, earned a Bachelor of Chemical Engineering degree from the University of Detroit. His post-graduate degrees include Master of Science in Chemical Engineering from Wayne State University and Master of Business Administration from the University of Michigan.

During his career Mr. Frank has served in numerous planning and engineering posts at American Natural and Great Lakes. He was consulting engineer with American Natural before joining Great Lakes in 1969 as manager of engineering service. He served as chief engineer from 1977 until his most recent promotion.

cross country

CALGARY

Employee No. 18 Retires

The first official retirement of an employee in the Calgary office was recognized recently. Employee No. 18, Jack Mackenzie, joined TransCanada at Calgary on Sept. 3, 1954. He and his wife Mae were honoured at a special luncheon where Jack received his certificate of retirement from Arthur Wilkins, Vice-President, Gas Supply, along with gifts from guests and the Calgary Mainliner Club.

Attending the luncheon were many of the long service employees from Calgary and special messages of congratulation were received from Toronto office employees. A folksy note came from Victoria, B.C., from Jack's former Supervisor, Forbes Abercrombie.

When Japan overran China in 1941, Jack, a general office assistant for a British printing machinery manufacturer,

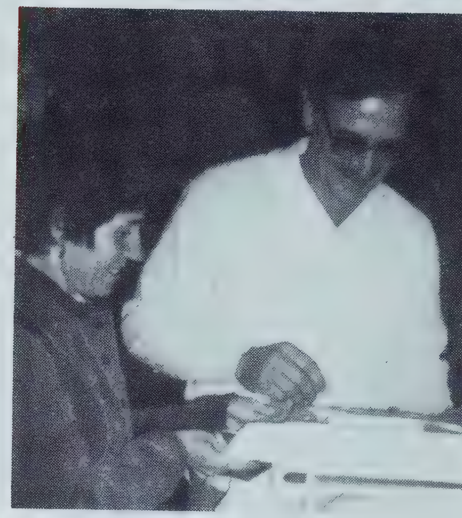
Employee No. 18, Jack MacKenzie.

was interned near Shanghai—an experience he would prefer to forget. After World War II, Jack returned to his job then later went to Hong Kong to work for a cotton import-export company. Here he met his wife Mae who had just returned from a visit to Canada.

Although it took her three years to convince Jack that Canada was the place to take up a new life, he took little time in becoming a Canadian and also TransCanada's employee No. 18.

Jack and Mae MacKenzie at a Mainliner corn roast in 1962.

FALCON LAKE

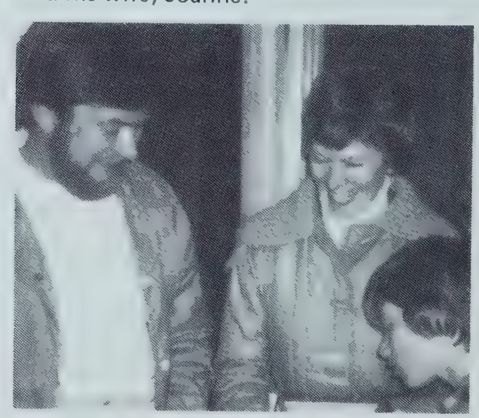


Bill and Ina Winterburn move to Kenora.

A barbecue and going away party was held recently for Bill and Ina Winterburn, and Bob and Carolyn Mitchell.

Falcon Lake Mainliner Club President, Bill Winslow, presented a gift on behalf of club members to the Winterburns. Bill is moving to District 49, Kenora, as Technician. Mainliner Club vice-president Frank Laba made the presentation to the Mitchells. Bob is moving to Central Area, Thunder Bay, as Technician.

Sub-District Manager Morris Johnston and his wife, Gloria, were the hosts for the party and their hospitality was greatly appreciated. Out of town guests included Sub-District 49 Manager Bob McMillan and his wife, Joanne.



The Mitchells move to Thunder Bay.

MATTICE

A going away party was held for former District Manager Jim Duff, recently. After 11 years at Station 92, Mattice, Mr. Duff is moving to Winnipeg, Manitoba.

Among the guests attending the party were: G. M. Hugh, Vice-President, Engineering and Operations-Compression, Central Area Manager J. M. Purvis and T. A. Gough of Eng/Ops Administration, Toronto.

The employees of District 92 wished Mr. Duff the best of luck at his new residence and presented him with a wristwatch and portable barbecue.

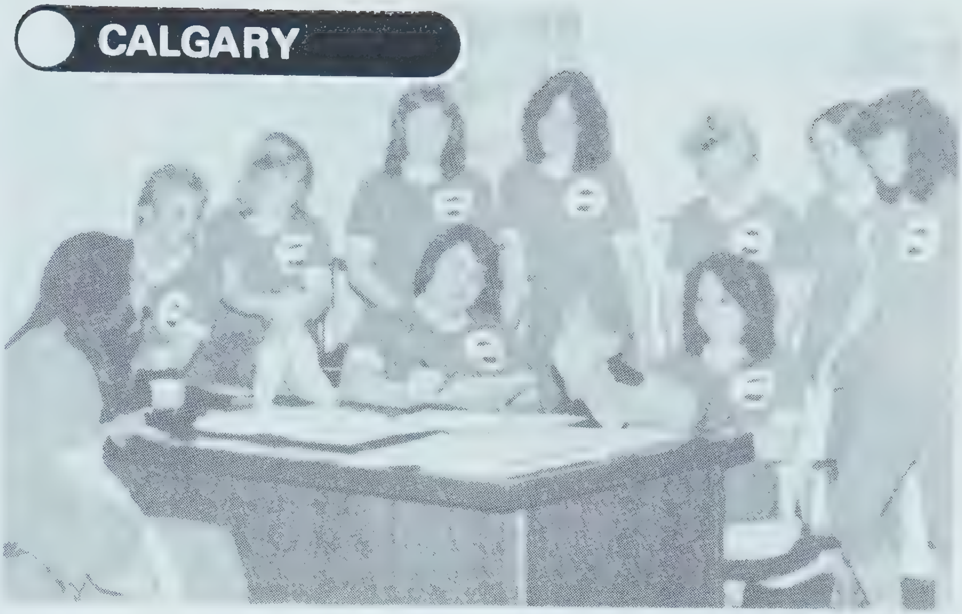
Kapuskasing's Donat Brousseau pool director Rhonda Leeman is shown with District Technician Jim Erickson of District 92, Mattice, who recently presented her with a "Resusci-Ann" doll donated by TransCanada PipeLines. The mannequin will be used primarily in the instruction of school-age children in Artificial Respiration, but will also be used by other groups interested in gaining proficiency in lifesaving techniques.

OBITUARY

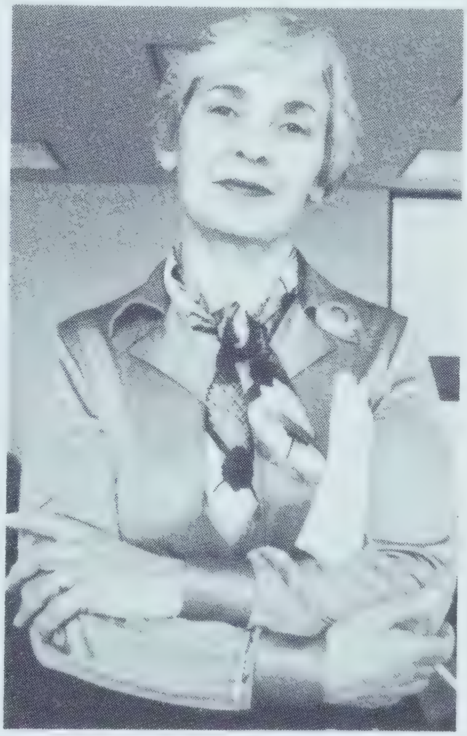
Sympathy is extended to the family of John Ahern, Construction Supervisor, Eastern Area, who passed away suddenly on June 14.

Mr. Ahern, 57, joined TransCanada in May, 1962. He is survived by his wife, Eileen, and two children.

CALGARY



If good looks, intelligence and taste in uniforms are keynotes of success, TransCanada's ladies baseball team is a guaranteed winner. As the season began part of the team gathered with coach Steve Thorburn to discuss strategy. Left to right; Carmen Allan, Zan Aycock, Nancy Dapp, Marion Dobson, Ruth Christiansen, Dagmar Rosenthall, Elouise Brissette, Marilyn Ling and Grazinda Hadala (seated).



Beth Bryan, Secretary to James W. Kerr, Company Chairman and Chief Executive Officer.

Beth Bryan Featured in 'Weekend Magazine'

A recent edition of Weekend Magazine carried an article on executive secretaries and one of the featured secretaries was TransCanada's Beth Bryan, secretary to James W. Kerr, Company Chairman and Chief Executive Officer.

This article mentioned that the English writer P.D. James observed that the perfect secretary is one who has "acquired or at least knows how to stimulate, some of the idealized attributes of wife, mother, mistress, confidante, servant and friend without being or indeed expecting to be one of these."

Her job is to shore up her boss's self-esteem, apportion his time, protect him from minor irritations, preserve his privacy and ensure that he knows all he needs to about the operation of his enterprise. All this and shorthand, too! The best secretaries end up guarding the doors of the most powerful figures in business, industry and government. If they do not regard themselves as indispensible members of the management team, neither do they see themselves as glorified coffee makers.

The article in the Weekend Magazine points out that Beth Bryan has been secretary for 13 years to Mr. Kerr and she talks about the transmission of natural gas as though it were the most fascinating process in the world. She takes shorthand dictation, makes travel arrangements, and maintains liaison with officers of the Toronto-based company. She will cheerfully pick up theatre tickets for her boss on her lunch hour, and, she says, "I don't mind bringing coffee to a group. I happen to like helping people."

Gary Faulkner, right, congratulates the in-coming President of the Mainliner Club, Claudio Capobianco. With them are: Joanne McCallum, left, and Bev Brush.

Chris Marshall of Purchasing shows the antique wall clock presented to him by his fellow employees prior to his marriage on June 16.

Employee involvement needed to ensure success of Mainliner Club

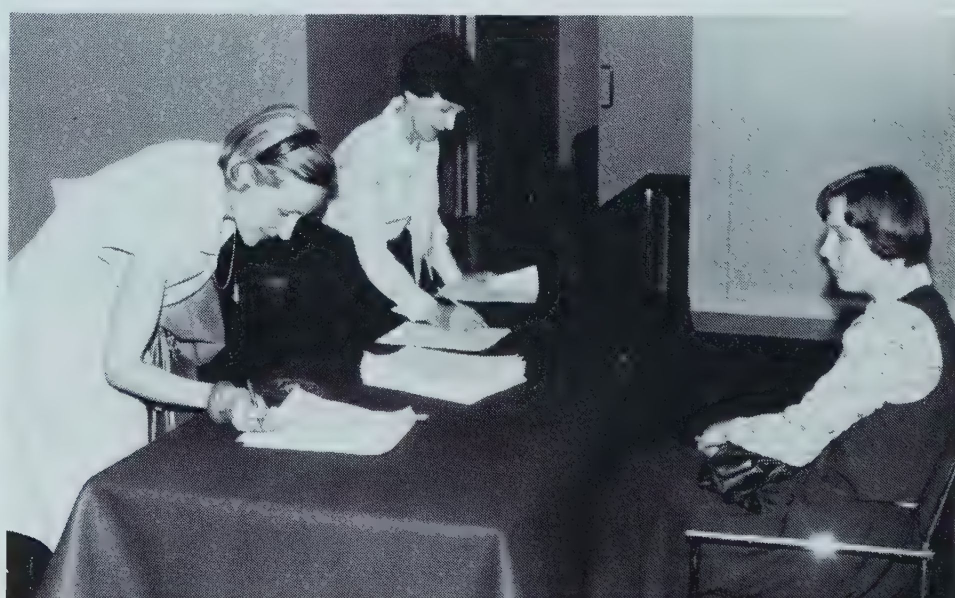
Commerce Court Hall was the scene of the 1979 Annual Meeting of the Toronto Branch of the Mainliner Club of Canada held in late April.

Out-going President Gary Faulkner of Accounting, said that he thoroughly enjoyed his year in office and thanked the members for giving him this opportunity to serve them.

Mr. Faulkner said that the club executive took a personal interest in trying to please and satisfy members in every way they could, and he was most grateful for their high level of performance.

He said that attendance at club events during the past year was very good, but that members should become involved in the Club, either by running for office or offering assistance in order for the Mainliner Club to continue to be a success.

Mr. Faulkner said that as President, it was one of his most enjoyable years at TransCanada PipeLines and he wished the new President, Claudio Capobianco, and his executive every success.



Joan Crozier of Energy Studies, right, watches Beverley Pope, left, and Nancy Burns, both of Purchasing sign in at the Mainliner Club Annual Meeting.

As others laugh . . .

This amusing cartoon has already appeared in two French language publications — Prevention, and then in Sauvegarde des Chantiers. It needs no caption, and shows yet again that laughter knows no language.

Credit Union members sign in at Annual Meeting held in the Toronto office lunchroom.

INTEREST REBATE 10 PER CENT

Credit Union members approve highest dividend rate ever

The highest dividend rate ever recommended by the Board of Directors of TransCanada PipeLines Employees' Credit Union was approved by a vote of the members in attendance at the Annual Meeting on May 25th.

Approximately 100 people attended this meeting, held in the lunchroom of Toronto office. Members approved a dividend rate of 9.6 per cent and a loan interest rebate of 10 per cent. This dividend rate compares favourably to interest rates now available at most financial institutions

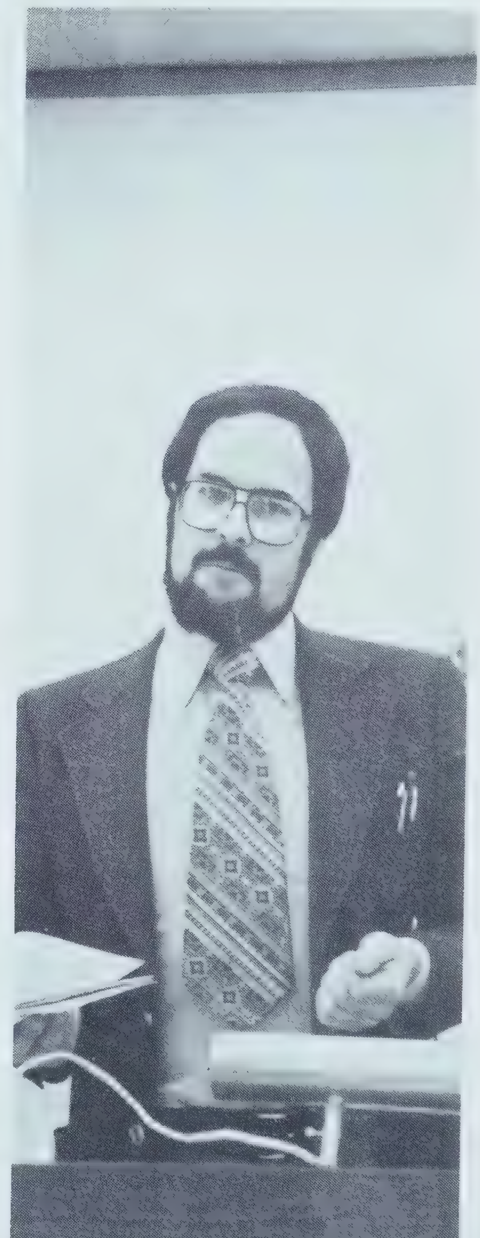
In his report to members, Credit Union President G.G. Penrose said that it is gratifying to note the confidence of the members in the Credit Union since the investment in shares increased during the year.

Mr. Penrose reported that the Credit Union enjoyed an 8.5 per cent increase in membership from 1193 members to 1294 members; an increase of 33 per cent in loans from $1,977,202 to $2,620,307, and a 14 per cent increase in savings from $2,172,778 to $2,467,528.

"The continued financial accomplishments of your Credit Union would not have been possible without the support and interest shown by TransCanada PipeLines," said Mr. Penrose. "Their support and interest over the years has contributed greatly to your Credit Union's success.

"I also wish to thank the Board of Directors and the members of all the committees for their support and efforts during the past year. The Credit Union staff, consisting of Joe Halloran, Dorothy Ryan and Vera Hall are also to be complimented for their efforts on behalf of the members of the Credit Union."

Mr. Penrose said that special appreciation is extended to those members of the Board who are retiring this year, namely, Jack Robinson, Colleen Byers, Ron Soble and Bill Dillon. Also retiring is committee member John Stuart, whose term of office has expired.



Credit Union President G. G. Penrose reports to members at Annual Meeting.

Shown in the directors' lounge of Toronto office are: from left; Susan Rutford, of Accounting, Peter Hosking, Paul Du Maresq, Randy Kaltin, Charla Briffa and Wayne Young of Accounting.

Dave Brown, left, of Accounting, with students Ronnit Mamber and Peter Crowley.

Students from Metro Toronto spend a day with TransCanada

Fifteen students from Metropolitan Toronto spent a day at TransCanada's Toronto office in late April, on the "A Day With Business" program organized by the Board of Trade in co-operation with various Metropolitan Toronto Boards of Education.

This major program, involving students and business people, will not only give assistance to the counselling function in the schools, but also will provide a first-hand view of business to students from the grade 12 level who would not normally be involved in a work experience during their school year.

In addition to general sessions, the students broke into smaller groups or individuals to discuss career related jobs.

The agenda for the students included viewing the film "TransCanada PipeLines—A Profile" and visits to Gas Control and the Computer room.

This program was co-ordinated by Employment Co-Ordinator John Epping, who discussed employment opportunities at TransCanada with the visiting students.

Students from Metro high schools toured Toronto office during their one-day visit.

Employment Co-Ordinator John Epping, center, discusses opportunities with visiting students.

Roman Bysh was a featured guitarist in the cabaret "Great Scenes for Lousy Lovers"

Receives acclaim as composer for rock comedy caberet

Roman Bysh of Office Services is known to many in Toronto office for his efficient handling of the mail but probably few know that he was recently applauded as a composer, having written the music for a new rock comedy cabaret "Great Scenes For Lousy Lovers".

The show ran weekends at Toronto's Dream Factory for more than a month and was given good reviews by Toronto critics. This cabaret featured 25 young theatre students taking a look at themselves in a two-hour show concerning surviving adolescence, rejection, adults, summer jobs, dieting and going west.

The cabaret originated from the teen theatre classes at the Theatre Plant in Toronto of which Ana Fuerstenberg is director and teacher.

Miss Fuerstenberg said, "I wrote most of the scenarios but the ideas for the entire show were a collaboration between myself, the students and Toronto composer Roman Bysh.

"Through conversations and improvisations, the kids were able to take a look and a laugh at themselves, and form a comedy show they believe everyone will be able to relate to in some way."

Roman, 24, who joined TransCanada as a mail clerk in January, 1978, was also a featured guitarist in the show.

Having taken classical guitar lessons for a short period, Roman soon discovered that he enjoyed composing music more than performing. He started composing seriously three years ago and has written dozens of songs.

people

HELLO TO—

Arsenault, M., Utility, Eng/Ops, Candiac.
Boehm, F. R., Supervisor Data Base Development, Contract Information, Alberta Affairs, Calgary.
Boros, E. (Mrs), Clerk, Eng/Ops — Administration, Toronto.
Boyrazian, S., (Miss), Typist, Purchasing, Toronto.
Floras, J. P., Junior Statistician, Energy Studies, Toronto.
Gale, S. F., Junior Programmer, Alberta Affairs, Data Processing, Calgary.
Heisler, L. E., Clerk, Gas Supply Statistics, Calgary.
Henningar, A. A., Clerk, Eng/Ops, Western Area.
Humphrey, J. T., Maintenance, Eng/Ops, North Bay.
Johnston, P. J. (Miss), Engineer I, Gas Supply, Operations, Calgary.
Liddle, R. T., Manager, Alberta Supply, Gas Supply, Calgary.
Masciotra, T., Senior Clerk, Accounting, Toronto.
McDonald, S. (Mrs), Secretary II, Purchasing, Toronto.
Miller, G. W., Office Services Ass't, Personnel, Calgary.
Peco, M. D., Graduate Engineer, Gas Control, Toronto.
Rumak, F. P., Engineering Assistant, Gas Supply Statistics, Calgary.
Stone, J. C., (Mrs), Market Analyst, Energy Studies, Toronto.

CHANGES — APRIL 1979

Anzenavs, R. A., Senior Engineer to Assistant Supervising Engineer, Eng/Ops Compression, Toronto.
Baqui, A., Engineer I to Engineer II, Eng/Ops Compression, Toronto.
Brennan F. A., Engineer II to Senior Engineer, Polar Gas Project, Toronto.
Britton, J. D., Aircraft Engineer II to Assistant Supervisor - Helicopter Engineering, Eng/Ops, Toronto.
Burkitt, L. L. (Miss), Clerk to Technical Clerk, Alberta Affairs & Gas Supply, Calgary.
Chen, T., Forecast Analyst to Senior Forecast Analyst, Alberta Affairs & Gas Supply, Calgary.
Couper, G. J., Supervising Engineer, Eng/Ops Pipeline to Manager, Eng/Ops Administration, Toronto.
Dickson, J., Senior Engineer to Assistant Supervising Engineer, Eng/Ops Compression, Toronto.
Dobson, M. D. (Mrs), Clerk to Senior Clerk, Alberta Affairs & Gas Supply, Calgary.
Dondlinger, S. M. (Miss), Senior Clerk to Technical Assistant, Alberta Affairs & Gas Supply, Calgary.

Farmer, F. H., Assistant Supervising Engineer to Supervising Engineer Eng/Ops Compression, Toronto.

Flucker, D. J., Patrol Pilot to Senior Pilot, Eng/Ops Pipeline, Central Area.

Friesen, B. W., Maintenance to Utility, Eng/Ops, Ile des Chenes.

Greflund, F., Engineer II to Senior Engineer, Eng/Ops Compression, Toronto.

Hall, R. M., Maintenance to Utility, Eng/Ops, Regina.

Henwood, D. E., Manager, Eng/Ops Administration to Manager, Pipeline Design & Construction, Eng/Ops, Toronto.

Jenkins, A. K., Engineer I to Engineer II, Polar Gas Project, Toronto.

Johns, W. D., Engineer I to Senior Engineer, Eng/Ops Compression, Toronto.

Lee-Ying, D. T., Engineer II to Senior Engineer, Polar Gas Project, Toronto.

Low, K. K., Graduate Engineer to Engineer I, Eng/Ops Compression, Toronto.

Luft, B. G., Co-ordinator to Manager, Gas Supply Statistics, Alberta Affairs & Gas Supply, Calgary.

MacDonald, D. F., Patrol Pilot to Senior Pilot-Helicopters, Eng/Ops Pipeline, Toronto.

McNeely, J. G., Engineer I to Engineer II, Alberta Affairs & Gas Supply, Calgary.

Najnar, J., Senior Engineer to Assistant Supervising Engineer, Eng/Ops Compression, Toronto.

Penney, W. R., Engineer II to Senior Engineer, Eng/Ops Compression, Toronto.

Pethrick, D. J., Engineer II to Senior Engineer, Eng/Ops Compression, Toronto.

Reid, D. E., Supervising Engineer to Manager, Compression Facilities, Eng/Ops, Toronto.

Rikhye, R. K., Technician to Senior Technician, Eng/Ops Compression, Toronto.

Romak, W. W., Utility to Technician 'M', Eng/Ops, Ramore.

Rose, R. H., Engineer I to Engineer II, Alberta Affairs & Gas Supply, Calgary.

Schissel, J. G., Senior Engineer to Chief Engineer - Operations, Alberta Affairs & Gas Supply, Calgary.

Svab, C. J., Maintenance to Utility, Eng/Ops, Caron.

Vernon, B. F., Senior Engineer to Assistant Supervising Engineer, Polar Gas Project, Toronto.

Ward, E. J., Technician to Senior Technician, Eng/Ops Compression, Toronto.

Wickwire, R. L., Senior Engineer to Supervising Engineer, Alberta Affairs & Gas Supply, Calgary.

Wong, J. C., Supervising Engineer, Eng/Ops Compression to Pipeline, Toronto.

Yip, A. C., Engineer I to Engineer II, Alberta Affairs & Gas Supply, Calgary.

Zaidi, S. H., Senior Engineer to Assistant Supervising Engineer, Eng/Ops Compression, Toronto.

MAY 1979

Anderson, A. R., District Welder, Thunder Bay to Senior Inspector, Eng/Ops, Central Area.

Bowman, R. C., Junior Accountant to Accountant, Accounting, Toronto.

Cortens, P., Clerk to Senior Clerk, Eng/Ops, Pipeline, Toronto.

Debassige, N. C., Senior Draftsperson to Drafting Checker, Eng/Ops Pipeline, Toronto.

Devey, K. E. (Mrs), Payroll Assistant to Accountant, Payroll, Toronto.

Dunn, J. W., Temporary Maintenance to Maintenance, Eng/Ops, Geraldton.

Fitzsimmons, D. A. (Mrs), Clerk to Secretary I, Eng/Ops Administration, Toronto.

Hankins, A. E., Senior Clerk to Payroll Assistant, Payroll, Toronto.

Hawley, R. C., Utility to Technician 'M', Eng/Ops, Maple.

Hormozian, A., Drafting Checker to Squad Leader-Drafting, Eng/Ops Pipeline, Toronto.

Jewitt, K. R., Draftsperson 'A' to Senior Draftsperson, Eng/Ops Pipeline, Toronto.

McLeod, D. F., Utility to Technician 'M', Eng/Ops, Moosomin.

Mitchell, R. J., District Technician, Kenora to Area Technician, Eng/Ops, Central Area.

Pierre, L. N. (Mrs), Draftsperson 'A' to Senior Draftsperson, Eng/Ops Pipeline, Toronto.

Quinton, L. R., Technician, Cobourg, to District Technician, Eng/Ops, Kingston.

Retford, S. P. (Mrs), Senior Clerk to Junior Accountant, Accounting, Toronto.

Rioch, I. D., Maintenance to Utility, Eng/Ops, Kenora.

Spriggs, K. C., District Technician, Kingston to Sub-District Manager, Engs/Ops, Ancaster.

Yearsley, G. A., Senior Draftsperson to Drafting Checker, Eng/Ops Pipeline, Toronto.

TERMINATIONS

Almadi, I. S., Alberta Affairs & Gas Supply, Calgary.

Anderson, W. G., Eng/Ops, Herbert.

Callow, R. B., Polar Gas Project, Toronto.

Dower, A. C., Alberta Affairs & Gas Supply, Calgary.

Dolnycky, A. D., Eng/Ops, Toronto.

Durnin, R. R., Eng/Ops, Kenora

Hague, J. A. (Miss), Purchasing, Toronto.

Haines, D., Alberta Affairs & Gas Supply, Calgary.

Hanna, R. M., Eng/Ops, Central Area.

Henry, J. D. (Miss), Eng/Ops, Western Area.

Mavety, A. B., Eng/Ops, Mattice.

McGill, S. H., Energy Studies, Toronto.

Nowatzki, E. M. (Miss), Alberta Affairs & Gas Supply, Calgary.

Orton, U. (Mrs), Eng/Ops Pipeline, Toronto.

Reader, M. R., Eng/Ops Administration, Toronto.

Rose, R. H., Alberta Affairs & Gas Supply, Calgary.

Schultz, A. J., Eng/Ops, Kenora.

Snitman, A. (Miss), Purchasing, Toronto.

Yip, A. C., Alberta Affairs Gas Supply, Calgary.

MARRAGES—

McGrath, A. L., Drafting, Station Design, Toronto, April 28, 1979.

Shih, P. C., Gas Control, Toronto, May 7, 1979.

Ware, J. F. (nee Rowan), Public Affairs, Polar Gas, Toronto, June 8, 1979.

BIRTHS—

Dempster, L. J. (Mrs), Eng/Ops, Gas Measurement, Toronto, Boy, Christopher Collin, May 26.

Fletcher, H. W., Treasury, Toronto, Boy, Erin Lee, June 22.

Gram, H. S., Eng/Ops, Toronto, Boy, Brent Michael, June 13, 1979.

James, R. C., Sales, Toronto, Girl, Margaret Linda, June 12.

Latimer, R., Aviation, Thunder Bay, Girl, Robin, April 18.

Rancourt, R., Eng/Ops, Mattice, Boy, Jason, April 22.

Waddell, W. J., Gas Supply, Calgary, Boy, Stephen James, May 1.

RETIREMENTS

Hunt, J. P., Eng/Ops, Kingston.

MacKenzie, J. D., Alberta Affairs & Gas Supply, Calgary.

SERVICE AWARDS

5 years

I. J. Langham
Eng/Ops
Toronto
April 1

J. D. McLean
Eng/Ops
Grenfell
April 1

D. J. Doyle
Accounting
Toronto
April 8

W. R. Penney
Eng/Ops
Toronto
April 15

G. E. Downton
Eng/Ops
Caron
April 16

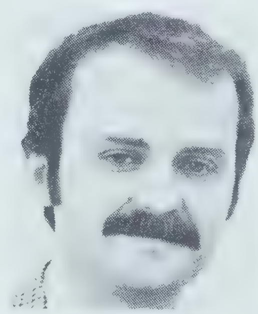
R. J. Joynt
Eng/Ops
Bracebridge
April 16

G. J. Couper
Eng/Ops
Toronto
April 25

I. E. McClure (Miss)
Planning & Development
Toronto
April 26

A. McGown
Eng/Ops
Toronto
April 29

G. A. Gonyou
Eng/Ops
Upsala
May 1



T.J. Ladanyi
Eng/Ops
Toronto
May 7

R. M. Tomlinson
Eng/Ops
Bracebridge
May 16

15 years

W. M. Howarth
Eng/Ops
Dryden
April 1

A. J. Gauthier
Eng/Ops
North Bay
April 16

D. E. Gourley
Eng/Ops
Ramore
May 4

K. J. Ryan
Eng/Ops
Haileybury
May 19

Employees of TransCanada PipeLines, Polar Gas and Great Lakes Gas Transmission Company, are invited to enter the Annual Photo Contest. The deadline for entries is September 28.

A cash prize of $50 will be awarded for the best entry in each of the four categories. Runner-up prizes of $20 will be awarded in each category. An additional $20 will be awarded for the 'best-in-the-show.'

Categories

1. Children
2. Scenery, Plants and Still Life
3. Where I Live: Photographs taken within your own city, town or area. Any photographs which you feel portray the character or mood of your area.
4. Miscellaneous

Color and Black and White

Either Black and White or Color photographs may be entered in all categories.

This year has been designated as the International Year of the Child by the United Nations. Marking this event, there will be two special classes for entries from employees' children in this year's photo contest. Children up to twelve years of age will constitute one class, while children from 13 to 16 will constitute a second class. There will be a $50 first prize and two runner-up prizes of $20 in these special classes. You may select any of the above categories for your subject material, or any other subject you feel appropriate to mark "Year of the Child".

Contest Rules

A. You may enter a maximum of four photographs, but no more than two in a single category.
B. Each photo entered must have been taken by the employee who submits it, during the past year.
C. Transparencies should be either 35mm or 2¼ x 2¼ and must be mounted. Black and white prints should be 5 x 7 or larger.
D. A category will NOT be judged unless it contains entries from at least three employees.
E. No contestant may win in more than one of the four categories.
F. Print your name and address plus the category on the back of each print or on the frame of each slide. (On glass-mounted slides, use a small label.)
G. Address your entries to: Along The Line Photo Contest
TransCanada PipeLines
P.O. Box 54 Commerce Court West
Toronto, Ontario M5L 1C2

Package your entries securely and mark 'Photos — Do Not Bend' plainly on the outside of the envelope. Contest deadline is September 28.


along
the
line
DECEMBER, 1979

along the line

Volume 23 No. 7, 1979

Correspondents

Calgary - Marnie Drinnan
Burstall - Don Mitchell
Cabri - Clarice Redmond
Herbert - Doug Osmond
Caron - Doug Yates
Regina - Georgie Phillips
Grenfell - Duane Tempel
Moosomin - Marg Lee
Rapid City - Mildred Stanick
Portage la Prairie - Peter Zondervan
Ile des Chenes - Bohdan Bodnar
Falcon Lake - Gordon Elder
Kenora - Art McMillan
Ignace - Ed Hipfner
Upsala - Corrine Donovan
Thunder Bay - Annette Seeber
Nipigon - Eini Rathje
Geraldton - Aksel Johnson
Hearst - Anna Vanderlip
Mattice - Ronald Begin
Ramore - Barbara Cameron
Haileybury - Neil Sheppard
North Bay - Joseph Williams
Bracebridge - Keith Moore
Maple - Richard Sampson
Ancaster - Aubrey Marshall
Grafton - George Crumback
Kingston - Gary Peck
Candiac - Jim Fradette

Front Cover

A winter scene in beautiful Geneva Park on Lake Couchiching, north of Toronto, where the world-famous Couchiching Conferences are held. The one-week conferences, concern topics on important public issues and delegates include interested citizens from all walks of life.

Published for the employees of TransCanada PipeLines and their families by the Public Affairs Department.

Publications Supervisor: **C. B. Tucker**

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Member International Association of Business Communicators

The legend of the CHRISTMAS TREE

Today, the Christmas tree is a center of our festivities.

Topped with a star, and glittering with lights and ornaments, it is a part of the beauty and meaning of the Christmas season.

How did the Christmas tree come to play such an important part in the observance of Christmas?

There is a legend that comes down to us from the early days of Christianity in England. One of those helping to spread Christianity among the Druids was a monk named Wilfred (later Saint Wilfred).

One day, surrounded by a group of his converts, he struck down a huge oak tree, which, in the Druid religion, was an object of worship.

As the oak fell to the earth, it split into four pieces, and from its center, there grew a young fir tree, pointing a green spire toward the sky. The crowd gazed in amazement.

Wilfred let his axe drop, and turned to speak.

"This little tree shall be your holy tree tonight. It is the wood of peace, for your houses are built of fir. It is the sign of endless life, for its leaves are evergreen. See how it points towards the heavens.

Let this be called the tree of the Christ child.

Gather about it, not in the wilderness, but in your homes. There it will be surrounded with loving gifts and rites of kindness."

And to this day, that is why the fir tree is one of our loveliest symbols of Christmas.

Author unknown

Season's Greetings

First of all, let me say how pleased I am to be given this opportunity to express my warmest greetings to you and your families at this most joyous festive season.

Since my arrival at TransCanada PipeLines on December 1, I have only been able to meet a few of you, but I hope over the next several months to meet with and greet most of our employees.

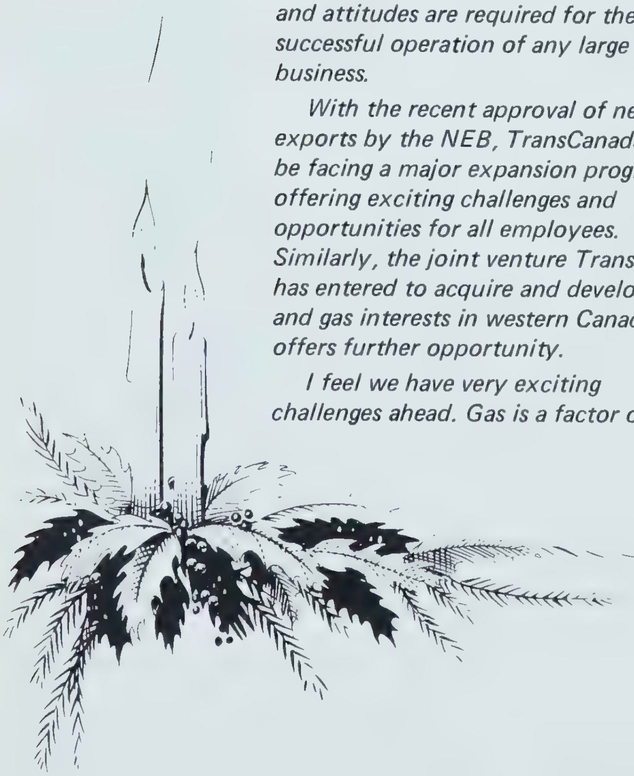
It's probably difficult for you to understand how a railroader would know anything about the natural gas business. CN Rail and TransCanada are both regulated companies in the broadest sense. And, although the analogy ends here, I believe the same basic qualities and attitudes are required for the successful operation of any large business.

With the recent approval of new gas exports by the NEB, TransCanada will be facing a major expansion program, offering exciting challenges and opportunities for all employees. Similarly, the joint venture TransCanada has entered to acquire and develop oil and gas interests in western Canada offers further opportunity.

I feel we have very exciting challenges ahead. Gas is a factor of growing significance in the energy balance in Canada. I look forward to working with you.

My sincere thanks to James W. Kerr and other members of management for their friendly welcome and cooperation. I wish Mr. Kerr a happy retirement from his post as Chairman and Chief Executive Officer, and I am pleased to be able to seek his advice in his capacity of Director and Consultant to TransCanada.

Christmas means many things to many people. But, for most, it is a time for joy and happiness, reflection and sharing. Mrs. Latimer and I hope that you and your families enjoy a full measure of health and happiness in the coming year.



Sincerely,

R. Latimer

President and Chief Executive Officer.

JAMES W. KERR RETIRES

"One of the giants of pipeline transportation"

Mr. and Mrs. Kerr cut the special cake presented to them on behalf of the Mainliner Club of Canada to celebrate Mr. Kerr's retirement.

"When Jim Kerr looks back on his 21 years, I am sure it will be with satisfaction. TransCanada is one of our country's biggest companies and probably the most efficient gas pipeline in the world. His standard of ethics and moral behavior have been adopted by the company and I am sure, are second to none. His recognition and advancement of people has been outstanding", said Company Director Gordon P. Osler, at a party for former Company Chairman and Chief Executive Officer James W. Kerr, at the Royal York Hotel on December 4.

Mr. Kerr retired as Company Chairman and Chief Executive Officer on November 30, 1979, bringing to a close 21 years of company service, having guided TransCanada from its commencement of operation. Although incorporated by a Special Act of Parliament on March 21, 1951, actual construction of TransCanada's pipeline did not commence until 1956. With the final weld in the original line on October 10, 1958, TransCanada became one of the world's longest natural gas transmission lines, with 3 765 km (2340 miles) of pipeline and six compressor stations.

Mr. Kerr was presented with a wood carving of a sparrow hawk by the noted Canadian sculptor G. A. Pletzer.

Today, TransCanada's system, stretching from the Alberta-Saskatchewan border through to Montreal, consists of 9 326 km (5795 miles) of pipeline and 48 compressor stations with 795 100 kW of compressor power (1,066,247 HP, LSO). It is Canada's 14th largest company, ranked by sales.

TransCanada's management team, under Mr. Kerr's guidance, has gained the company an international stature for its various technological developments associated with natural gas pipeline operation.

Born in Hamilton, Ontario, Mr. Kerr attended the University of Toronto, graduating in 1937 with a B.Sc. in Applied Science and Engineering. His first job was on the apprentice course at Canadian Westinghouse. He then joined the Royal Canadian Air Force, retiring at war's end with the rank of squadron leader.

In the next decade he moved up at Westinghouse, attaining the position of Vice-President and General Manager in 1956. Mr. Kerr was appointed President and Chief Executive Officer of TransCanada PipeLines in December 1958. He was elected Chairman of the Board and President in April 1961, and was named Chairman and Chief Executive Officer in 1968.

In June 1976, Mr. Kerr became the first Canadian to be elected President of the International Gas Union, an organization of national gas associations of 36 countries. He served from 1973 to 1976 as Vice-President of the International Gas Union.

The 14th World Gas Conference and Gas Industry Exhibition was held in Toronto May 27 to June 1 and 2,300 delegates attended. Mr. Kerr chaired this major conference where more than 100 companies and associations from the 36-member countries displayed and demonstrated gas industry state of the art equipment and technology.

Long associated with the gas associations, Mr. Kerr served as President of the Canadian Gas Association and currently serves as a Director of the American Gas Association.

Mr. Kerr is a Director of several corporations and institutions including: Bell Canada, Canadian

Imperial Bank of Commerce, Algoma Steel Corporation, The Manufacturers Life Insurance Company, International Minerals & Chemical Corporation (Canada) Limited, Lehndorff Corporation and Great Lakes Gas Transmission Company.

He is a member of a large number of associations and is active in many social and cultural activities. Mr. Kerr is Vice-President, Board of Governors and Trustee, Queen Elizabeth Hospital; on the Board of Governors, Ontario Research Foundation and a member of the Engineering Institute of Canada.

John P. Gallagher, Chairman and Chief Executive Officer, Dome Petroleum Limited, and a Company Director, addressed Directors' party.

A Past President of the Board of Trade of Metropolitan Toronto, he was awarded the Queen's Silver Jubilee Medal and the Julian C. Smith Award for contribution to the development of Canada. In May of this year, he was elected to the grade of Fellow of the Engineering Institute of Canada.

On November 30, a party was held in honor of Mr. and Mrs. Kerr by

At retirement party for Mr. Kerr at the National Club, Beth Bryan pins boutonniere on her boss.

TransCanada's management group at the National Club. Here, the Kerrs were presented with a "symbolic" painting of their Muskoka cottage. The painting, which was not finished in time for this party, is being executed by the well known Canadian painter, James Bessey. Mr. Kerr cited the high quality of TransCanada's management team and how well they work together.

The evening of December 1 was the Toronto Mainliner Club's Christmas Dinner and Dance at the Sheraton Centre. The more than 700 participants who braved Toronto's first snowstorm of the year, were pleased to toast Mr. and Mrs. Kerr. They were presented with a copper coal scuttle by Mainliner Club President Claudio Capobianco.

Mr. Kerr told the assembled Mainliners that he sincerely appreciated the dedicated effort and loyalty of employees during his 21 years. He said that all TransCanada men and women have played a major role in the development and progress of the company. He expressed great pride in the ability of TransCanada people to meet new challenges in the future.

At the dinner party held by the Board of Directors and Senior Management for Mr. Kerr at the Royal York Hotel on December 4, Mr. Kerr thanked the directors for their advice and counsel. He said that he had chaired 269 Board of Directors meetings during his 21 years. Mr. Kerr was presented with a wood carving of a sparrow hawk by the noted Canadian sculptor, G. A. Pletzer.

Another speaker at the Directors' party was former company Director J. Ross Tolmie, who said; "Since Jim was made head of TransCanada it has never looked back. It has continued to grow and wax prosperous. We always knew that we were extremely fortunate in having one of the giants of pipeline transportation in North America running our show.

"His recent presidency of the International Gas Union bears witness to his global eminence in his field."

Mr. Kerr remarked that retirement happens to all of us someday, and he hoped everyone in management enjoys their career as much as he has. He extended sincere wishes to the new management team of Radcliffe Latimer, John Beddome and George Woods. He also thanked the directors for the priviledge of being Chief Executive for so many years.

TCPL's history preserved in Glenbow Archives

How often have we thrown out an old letter or piece of paper only to have someone ask for it the next day?

It seemed like the right decision at the time. After all, who would want it anyway? We can't keep files and papers forever. We simply don't have the space. "Old" means useless and useless means garbage. Until someone needs it!

Outdated files, letters, documents and photographs cause storage problems as companies are forced to make room for new and more current material, and often in the housecleaning, potentially valuable items end up deep in the heart of the city's garbage heap, buried and forgotten forever.

Fortunately, TransCanada PipeLines recognized the value of historical documents and utilized one of Canada's most reputable vehicles for preservation in the archives — The Glenbow-Alberta Institute. Over 50 cartons of material from the Calgary office's Public Affairs library, were earmarked for the archives, after careful selection.

The company's donation includes hundreds of photographs of facilities and construction dating back to the first days of construction in 1956, the first gas purchase contract dated in 1954, its official incorporation papers, a Special Act of the Parliament of Canada in 1951, and one of the most detailed and comprehensive news clipping libraries on the petroleum industry in western Canada, including coverage on the historic "Pipeline Debate" of 1956.

The Glenbow, as it is known to Albertans, was established by Calgary oil man, lawyer and rancher Eric L. Harvie. Mr. Harvie saw little effort towards the preservation of western Canada history so he set out to do just that.

In 1955 he established the Glenbow Foundation and in 1966 turned his entire collection of historical artifacts and documents over to the people of Alberta as a centennial gift along with a sizable sum of money, which the province matched, to establish a "home" for this heritage record.

Along with TransCanada, many companies have already donated historical material to the Glenbow for preservation and available public access.

"Companies feel their material is available to both company employees and the general public when it is stored here in our archives," said Chief Archivist Sheilagh Jameson.

Historical material kept in the Glenbow archives is used by a large cross-section of interested persons, Miss Jameson said. The majority includes students, academics, teachers, writers, local historians, family history buffs and even government departments such as Parks Canada's Historic Sites group.

"In October 1979, we had 426 persons visit us. About 318 were here to study material preserved in the archives while the remainder came to have a look at our facilities," Miss Jameson said. "We also had about 140 telephone enquiries about material on hand."

The photographic section of the archives, where TransCanada's photo contribution is indexed and stored, attracts considerable attention. Researchers may obtain reprints for commercial use.

Film producers examining the visual material must file their intentions with the Glenbow before any material is reprinted and released.

"Unless their use of the photos promotes the cause of history we have to turn them down," Miss Jameson said.

The procedure for gaining access to the documents available in the archives is simple. Researchers arrive at the archives and report to an archivist who helps fill out a reference card outlining the research desired and related material required.

The archivist discusses the project and guides the researchers in their efforts to compile the information they require, Once the precise material needed has been identified, the archivist steps into the huge storage area attached to the spacious reading room and retrieves the precious documents stored in acid-free boxes to ensure safe preservation.

Precise procedures over access to the material ensures the safety and control of the historical documents. Because archivists are human, the system also helps trace material accidently misfiled, Miss Jameson said.

Glenbow moved into its current home in the Calgary Convention Centre across the street from the Calgary Tower in the heart of the city in 1976. The facilities are modern and the staff conscientious as the history of western Canada is preserved for future generations with concern and care so rarely found in today's assemblyline world.

Sheilagh Jameson, Glenbow-Alberta Institute's Chief Archivist (right), and Georgeen Barrass, Assistant Chief Archivist in charge of photographs (left), examine donated documents and photographs with TransCanada's Marnie Drinnan. More than 50 cartons of material have been donated by TransCanada to the Institute's archives for preservation and improved public access in the continuing effort to record and preserve western Canadian history. Mrs. Drinnan, former librarian at the Calgary Herald, retired from TransCanada recently after nearly 25 years of service with the company.

TCPL Resources/Maligne:

OIL AND GAS JOINT VENTURE

TCPL Resources Ltd., a wholly owned subsidiary of TransCanada PipeLines, and Maligne Resources Limited, a wholly owned subsidiary of Dow Chemical of Canada Limited announced the formation of a joint venture to acquire and develop oil and gas interests in western Canada. Maligne has owned a 25% undivided interest in a portion of the onshore oil and gas properties of Dome Petroleum Limited under the terms of a 1974 Agreement and has exercised and is exercising, pursuant to that Agreement, the right to participate in a like interest in other properties including Siebens, Mesa and Sabre recently purchased by Dome.

TCPL Resources will purchase a 50% share of the increased assets of Maligne. The joint venture will continue the relationship with Dome and provide greater opportunity for expanding the search for hydrocarbon and mineral deposits in Canada.

The joint venture's assets, which are owned equally by TCPL Resources and Maligne, include established reserves of approximately 14 billion cubic metres (500 Bcf) of gas and in excess of 1.6 million cubic metres (10,000,000 barrels) of oil. The partnership also has a working interest in 7 200 000 gross hectares (17,800,000 gross acres) amounting to approximately 680,000 net hectares (17,000,000 net acres). In addition, the partnership has rights and interests in 1 700 000 gross hectares (4,200,000 gross acres) of mineral titles equal to approximately 300 000 net hectares (800,000 net acres) and royalty interests in approximately 2 200 000 hectares (5, 400,000 acres).

Benefit program explained

Jean King, Supervisor, Benefits, and Peter Scheirich, Manager, Personnel, answer questions on the company's benefit program during recent meetings for Toronto office employees at Commerce Hall. Employees were shown a video program on the Benefit Program and the Savings Plan's options were also discussed. At the same time, employees saw a video presentation on the company's Code of Business Ethics. These benefit program meetings have been held for employees all across the TransCanada system.

How to think metric temperatures

Just thinking in metric terms is difficult for many, but being able to seems to be the clue to making the conversion from standard to metric units easier.

Many weather stations broadcast Celsius temperatures, but this may do little for the average person, to "think" metric.

Here is one approach.

When the Celsius temperature has a negative sign
(e.g.– 18°C) — THINK VERY COLD

When it has a single digit
(e.g. 8°C) — THINK COLD

When number is 2 digits and first one is 1
(e.g. 15°C) — THINK COOL

When the number is 2 digits and first is 2
(e.g. 25°C) — THINK WARM

When first is 3 — THINK HOT and rightly so
+ 35°C is 95°F!!!

A decade of Along The Line photo highlights

If a picture is really worth one thousand words this special review of Along The Line photographs should keep most readers occupied until the clock strikes 12 on the last day of this decade.

With the first issue of 1980 Along The Line will start its 24th year of publication. That is 24 consecutive years—a rare achievement for an employee magazine. Throughout this near quarter century of publication, TransCanada's employee magazine has covered the activities of company employees across Canada.

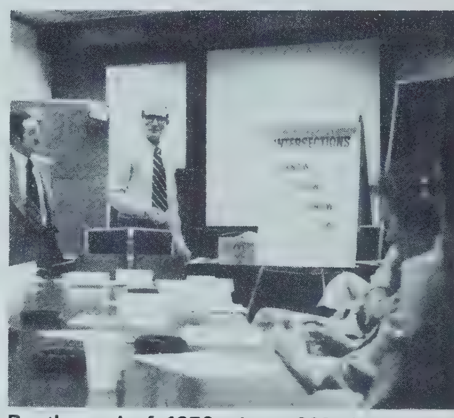
Thousands of photographs have crossed the editor's desk during the 70's. Through the years the magazine has included a wide selection to cover employee activities both on and off the job. The photographs reproduced on these pages represent only a few of the people and events that were part of our lives during this decade. Hopefully, readers will see something here that brings to mind a story or an event that Along The Line has covered in the past 10 years.

Fashions have changed dramatically in the past decade. This is Erica Conlin, stenographer, who was photographed by Along The Line in 1971 when she joined TransCanada's field staff at Station 130, Maple.

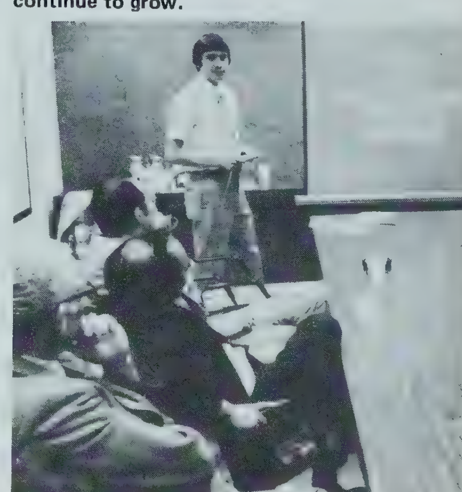
The company has an excellent record of support to blood donor clinics. The photographer caught this smiling donor in August, 1973, when 62 employees visited The Canadian Red Cross Society clinic at Commerce Court.

This photograph was used on the cover of the April, 1979 issue to highlight the contribution made by TransCanada employees to the construction of a new arena in Moosomin, Saskatchewan.

In the summer of 1979, Along The Line carried a story about the new Polar Gas plans for a combined pipeline system from the Arctic Islands and the Mackenzie Delta/Beaufort Sea areas. The Polar Gas engineers in this photo are working on a survey of M'Clure Straight, inside the Arctic Circle.



By the end of 1976, about 600 TransCanada field employees, 90 Toronto office and 50 Calgary office employees had been certified in Defensive Driving courses. The numbers continue to grow.



In the summer of 1974 the Personnel Department commenced a series of information meetings using a slide presentation to describe TransCanada's Benefits Program to employees.

In the fall of 1973, the magazine featured the Kapuskasing region of northern Ontario. The story told how in 1911 the National Transcontinental Railway, then under construction, reached the present site of Kapuskasing. About 47 years later, the final weld was made on the original TransCanada PipeLines system just outside the Town.

A story on the 1970 Christmas party for children in Toronto featured these two pretty elves and this lost little boy with a contented smile.

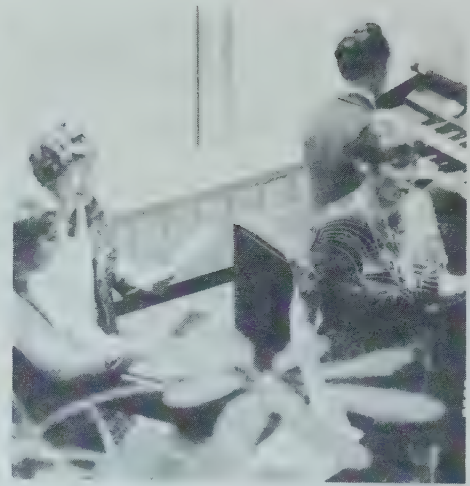
This scenic view of Station 136, in Shelter Valley near Grafton, Ontario, appeared with a "station story" in the early 70's.

A recreation and cross-country ski center named the James W. Kerr Park was created by the company in the Fall of 1977 near Station 123, Bracebridge. This photo was taken early in the morning of opening day before the crowds arrived.

The 14th World Gas Conference and Gas Industry Exhibition was held in the spring of 1979 at Toronto. More than 2,300 delegates attended from around the world and many visited the TransCanada exhibit.

This Christmas photograph from the January, 1971 issue of Along The Line shows food goods and Chirstmas gifts collected by TransCanada employees at the Toronto office on Eglinton Avenue to brighten the Christmas season for some Toronto families.

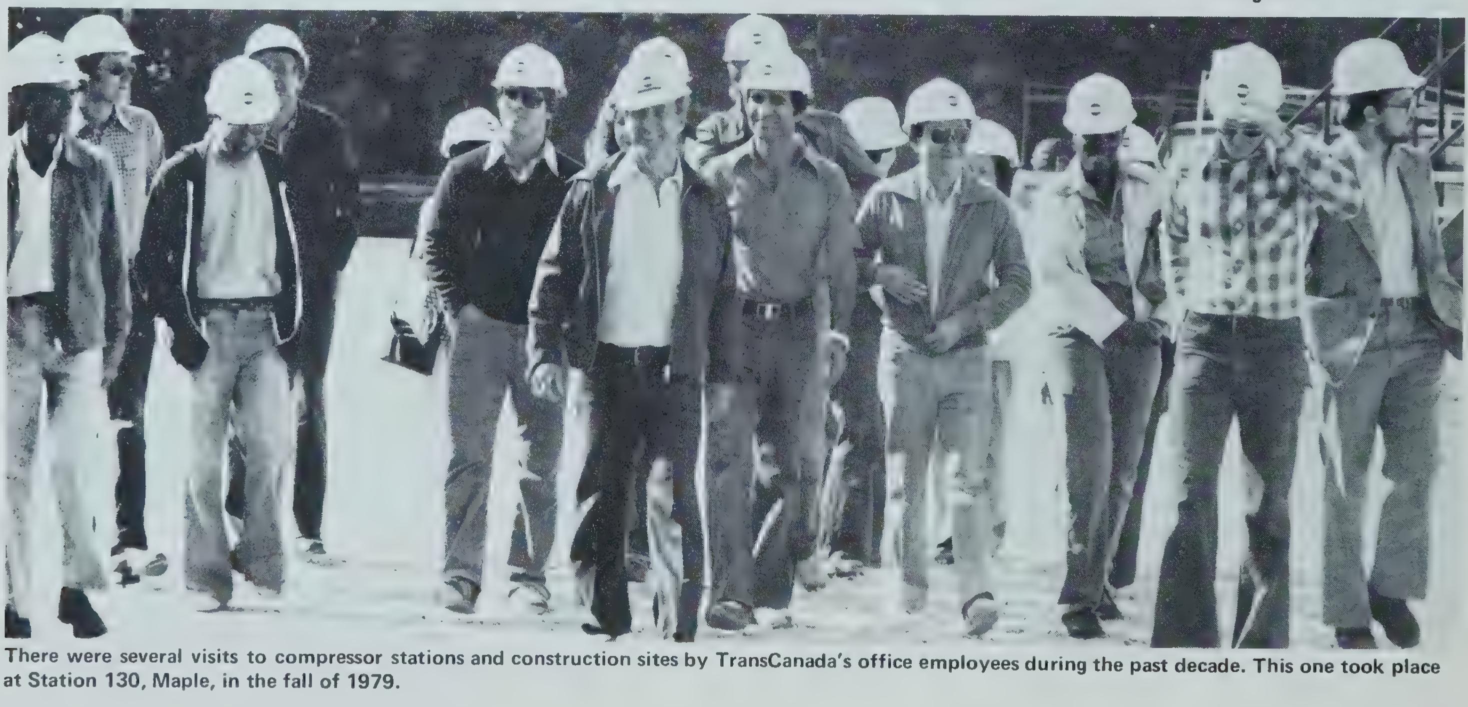
A group of TransCanada employees and spouses are shown in the directors' lounge area of Toronto office during the second Retirement Communications meeting in April, 1977.



The Christmas 1977 issue of Along The Line featured photo coverage of Toronto office employees singing carols in the mornings before work.

In February, 1971, Along The Line ran this photograph on the cover to remind readers that winter isn't such a bad time after all. In fact, it was one of the worst winters of the decade.

A large number of students have spent their summers working for TransCanada, including this sociology graduate in the summer of 1973. The Along The Line story was written and photographed by a student working for summer on the magazine.



There were several visits to compressor stations and construction sites by TransCanada's office employees during the past decade. This one took place at Station 130, Maple, in the fall of 1979.

cross country

ILE DES CHENES

The play Artichoke is set on a 500 acre farm near the town of Raglan, Saskatchewan. The action of the play takes place over the period of a summer in the early 1970's.

On November 15, Station 41, Ile des Chenes, and Western Area employees were treated to the live theatre production of Artichoke, a play by Joanna M. Glass.

This was no ordinary Mainliner Club event because the Manitoba Theatre Centre invited 100 TransCanada employees, family and friends to attend their full dress rehearsal the night before the official opening.

TransCanada PipeLines sponsored this Canadian production and all who attended the dress rehearsal enjoyed it thoroughly, becoming hooked on theatre. Artichoke ran at the Manitoba Theatre from November 16 – December 8.

This production portrayed what appeared to be a typical Saskatchewan family in some very unusual circumstances. The results were quite overwhelming.

The marquee of Winnipeg's Manitoba Theatre Centre, showing company's sponsorship of Artichoke.

TORONTO

CHRISTMAS DINNER-DANCE

It's beginning to be a habit, but again this year the Toronto Mainliner Club's Dinner and Dance coincided with Toronto's first crippling snowstorm.

Mainliner Club Secretary Sue Ferguson and other head table members were piped into the 'grand ballroom'.

George W. Woods, Vice-Chairman and Chief Operating Officer, paid tribute to Mr. Kerr's 21 years of service.

Joy Harris and Ray Suchan of Systems and Data Processing, were getting in the swing.

Company President and Chief Executive Officer Radcliffe R. Latimer shared an amusing anecdote with Mainliners.

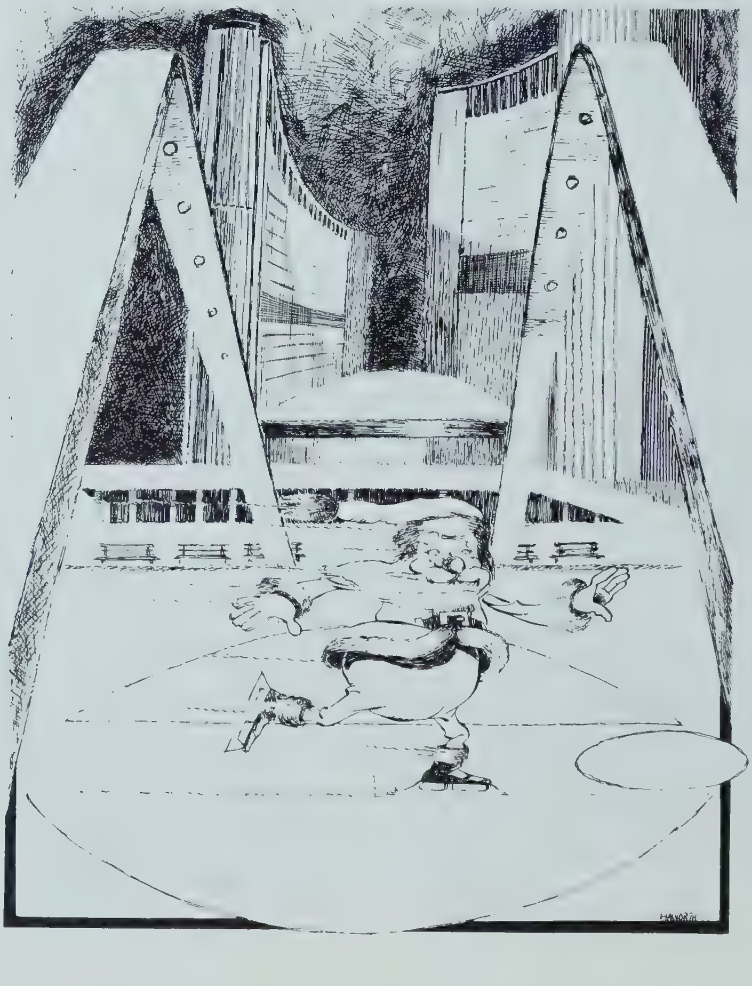
For some people, a trip from home to the Sheraton Centre which might generally take 30 minutes, stretched to three hours. Some were not brave enough to attempt driving downtown.

However, approximately 700 Mainliners showed up and thoroughly enjoyed themselves. The music by the Circus Dance Band and disc jockey Bill Bueckert was excellent and all but erased the memories of last year's 'music'.

A special cake was presented to Mr. and Mrs. James W. Kerr, to mark Mr. Kerr's retirement as Company Chairman and Chief Executive Officer on November 30.

Toronto Mainliner Club President Claudio Capobianco presented Mr. and Mrs. Kerr with a gift of a copper coal scuttle on behalf of the Mainliner Club members. They were also given a "Life Membership Scroll" to The Mainliner Club of Canada.

Company Vice-Chairman and Chief Operating Officer George W. Woods paid tribute to Mr. Kerr and welcomed Radcliffe R. Latimer, newly appointed President and Chief Executive Officer to his first Mainliner Club party. Mr. Latimer thanked everyone for their kind welcome.



Robert Howell receives his membership certificate in the Quarter Century Club from G. M. Hugh, right, Vice-President, Eng/Ops—Compression.

25-year man Robert Howell

"I've worked all across our system—field operations, Calgary and Toronto offices—and looking at the company now, I can see that the next five years are going to be just as exciting as any five years in the past," said R. F. Howell, Right-of-Way Maintenance Co-ordinator, Eastern Area.

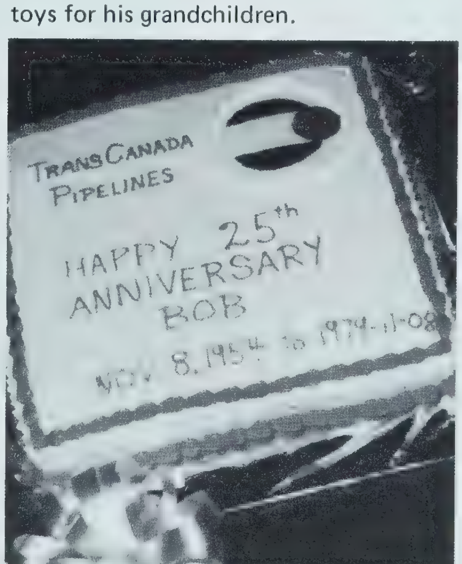
Robert Howell celebrated 25 years of service on November 8, having joined the company in Calgary in 1954 as a Senior Accountant. He moved to Regina, Saskatchewan in 1956, for the first leg of the original pipeline construction from the Alberta/Saskatchewan border to Regina.

In December of 1956, he moved to Toronto office, then located at Bloor and Church Streets, doing construction projections. He became Office Manager in 1957 and supervised the subsequent moves of Toronto office to King and Church Streets in 1957 and to 150 Eglinton Avenue East in the fall of 1959.

He moved to the Division office located in Richmond Hill in 1960 and in 1969 was appointed District Superintendent, located at Station 130, Maple. In 1974, he moved to his present job in the Eastern Area office.

Born in Hillsboro, Texas, Robert moved to Edmonton, Alberta in 1953 where he worked with an accounting firm. A Canadian citizen, Robert and his wife, Barbara, have one son, Robert, who works in Cancer Research in London, Ontario; and two daughters, Brenda and Tanys, both school teachers.

The Howells have five grandchildren and Robert is now spending his leisure time on his favorite hobby—woodworking. Presently, he is re-designing and making toys for his grandchildren.



Robert's fellow employees at Eastern Area office had this special cake made to celebrate his 25 years of service.

A TIME FOR GIVING

It takes Ken approximately two hours to make one candle.

Christmas is a time for giving, and giving can take many forms—giving of time, talent and money—to name a few.

One person who gave of his time, talent and money to raise money for a worthy cause this Christmastime was Ken Foster, Senior Technician, Pipeline Facilities, Toronto office.

As you might recall from an article in Along The Line last December, Ken started making candles five years ago. This year, he decided to sell candles to TransCanada employees to raise money for a suitable cause. Since 1979 is the Year of the Child, Ken decided to donate the money to the Sick Children's Hospital.

Ken donated $242.00 to the Hospital, having sold 78 candles to employees. These candles, with Fall Maple leaves applied, took Ken five weeks of all his spare time and weekends to complete. It also cost him $100.00 in paraffin wax and other supplies.

SERVICE AWARDS

25 years

R. F. Howell
Eng/Ops
Eastern Area
November 8

15 years

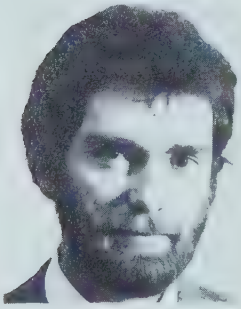
J. M. Klim
Eng/Ops
Ignace
October 21

G. T. Wood
Eng/Ops
Caron
October 1

Emmanuel Olson
Eng/Ops
Geraldton
November 16

L. W. Forbes
Eng/Ops
Caron
December 1

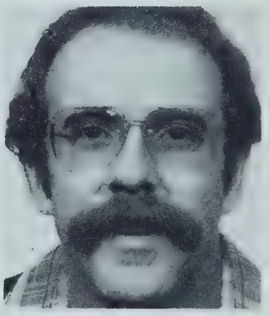
5 years



B. P. Muzerall
Eng/Ops
Toronto
October 1

D. H. Fawcett
Eng/Ops
Toronto
November 1

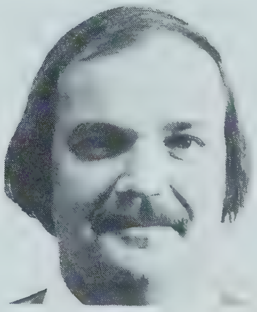
T. D. Innes
Internal Audit
Toronto
November 1



D. R. Feldman
Eng/Ops
Ile des Chenes
November 4

S. G. Han
Eng/Ops
Toronto
November 4

H. G. Cox
Eng/Ops
Toronto
November 25



D. J. Dyer
Eng/Ops
Toronto
November 25

Ronald Page
Eng/Ops
Toronto
November 27

people

CHANGES — NOVEMBER 1979

Amm, B. C., Maintenance, Eng/Ops, Geraldton to Hearst.
Brown, C. D., Maintenance to Utility, Eng/Ops, Bracebridge.
Brown, M. A. (Mrs), Solicitor III, Legal, Toronto to Calgary.
Bue, N. P., Temporary Maintenance to Maintenance, Eng/Ops, Cabri.
Burton, R. C., Junior Accountant to Accountant, Treasury, Toronto.
Caguiat, M. (Mrs), Senior Secretary, Compressor Facilities to Compression Supervision, Eng/Ops, Toronto.
Cameron, A. G., Supervisor to Manager, Printing, Toronto.
Couper, N. B., Senior Technician, Eng/Ops, Pipeline to Senior Administration Assistant, Eng/Ops, Compression, Toronto.
Culleton, E. T., District Clerk, Kenora to Administration Assistant, Eng/Ops, Administration, Toronto.
Dillon, W. J., Assistant Supervisor to Supervisor, Printing, Toronto.
Dunlop, C. B., Maintenance to Utility, Eng/Ops, Regina.
Gonyou, G., Maintenance to Utility, Eng/Ops, Upsala.
Hellman, C. H., Utility, Eng/Ops, Burstall to Caron.
Joel, P. J., Senior Systems Analyst to Project Leader, Systems & Data Processing, Toronto.
Johnston, J. G., Engineer II, Eng/Ops, Compression to Eng/Ops, Pipeline, Toronto.
Keeler, C. W., Temporary Maintenance to Maintenance, Eng/Ops, Caron.
Kerr, L. (Mrs), Technical Clerk to Junior Accountant, Alberta Affairs and Gas Supply, Calgary.
Leggett, C. M. (Mrs), Senior Secretary, Administration to Executive Secretary, Rates, Toronto.

Leung, T. W., Junior Accountant, Accounting to Junior Administration Assistant, Eng/Ops, Administration, Toronto.
Malcolm, W. D., Maintenance to Utility, Eng/Ops, Cote Ste. Catherine.

McPartland, J. S., Engineering Assistant to Inspector, Eng/Ops, Eastern Area.

Odlum, R. A., Junior Accountant, Accounting to Treasury, Toronto.

Rogers, G., Temporary Maintenance to Maintenance, Eng/Ops, Kingston.

Sellars, M. I. (Mrs), Senior Secretary, Eng/Ops, Pipeline to Gas East, Toronto.

Sullivan, T., Maintenance, Eng/Ops, Hearst to Geraldton.
Tempel, D. A., Maintenance to Utility, Eng/Ops, Grenfell.
Vaisburd, M., Temporary Inspector to Inspector, Eng/Ops, Eastern Area.

HELLO TO:

Chan, C.S.P., Graduate Engineer, Facilities Planning, Toronto.

Constable, M. A., Senior Clerk, Accounting, Toronto.

L., Franz, Inspector, Eng/Ops, Construction, Central Area.

Hamaoui, R. (Mrs), Receptionist-Typist, Public Affairs, Montreal.

Jensen, D. (Miss), Clerk, Accounting, Toronto.
Konkin, M. T. (Miss), Secretary I, Public Affairs, Calgary.
Marbes, P., Inspector, Construction, Field, Central Area.
Newman, J. B., Maintenance, Eng/Ops, Ignace.
Payne, C. (Mrs), Clerk, Gas Supply - Legal, Calgary.
Roman, V. C., Inspector, Eng/Ops, Central Area.
Thornhill, K. E., Assistant Computer Operator, Systems & Data Processing, Toronto.
Whitmore, R., Clerk, Accounting, Toronto.
Yeap, H. B., Project Leader, Data Processing, Alberta Affairs, Calgary.
Zulianello, D. M. (Mrs), Clerk, Eng/Ops, Central Area.

TERMINATIONS — NOVEMBER 1979

Allan C. G. (Mrs), Alberta Affairs & Gas Supply, Calgary.
Ang, H. S., Eng/Ops, Pipeline, Toronto.
Chen, T., Alberta Affairs & Gas Supply, Calgary.
de Klerk, A. (Mrs), Alberta Affairs & Gas Supply, Calgary.
Heisler, L. (Mrs), Alberta Affairs & Gas Supply, Calgary.
Kobayashi, F., Eng/Ops, Compression, Toronto.
Lacroix, M. J., Eng/Ops, Administration, Toronto.
Phelan, W., Eng/Ops, Upsala.
Rasmussen, E., Alberta Affairs & Gas Supply, Calgary.
Roest, A. (Mrs), Alberta Affairs & Gas Supply, Calgary.
Rumak, F. P., Alberta Affairs & Gas Supply, Calgary.
Singbeil, K. H., Eng/Ops, Ignace.
Singh, D., Alberta Affairs & Gas Supply, Calgary.
Trachimovsky, S. B., Legal, Toronto.

MARRIAGES:

Camphoug, K. J., Eng/Ops, Caron, October 6.
Celmer, I. J., Aviation, Central Area, October 6.
Follett, R. B. B., Gas Supply - Reserves, Calgary, October 20.
McFarlane, J. R., Eng/Ops, Kingston, October 20.

BIRTHS:

Lambert, F. J. J., Eng/Ops, Smooth Rock Falls, Girl, Rachel M., May 8.

From the staff and correspondents of

ALONG THE LINE

Season's Greetings

along the line

MAY 1980

along the line

Volume 24 No. 3, 1980

Correspondents

Calgary—Tom Donoghue
Burstall—Don Mitchell
Cabri—Clarice Redmond
Herbert—Doug Osmond
Caron—Doug Yates; Stan Boyko
Regina—Georgie Phillips
Grenfell—Duane Temple; Orest Nawrocki
Moosomin—Marg Lee
Rapid City—Carol McLaughlin
Portage la Prairie—Peter Zondervan
Ile des Chenes—Rod Craven
Falcon Lake—Gordon Elder
Kenora—Art McMillan
Ignace—Ed Hipfner
Upsala—Rose Mutton
Thunder Bay—Annette Seeber; Eini Rathje
Geraldton—Aksel Johnson
Hearst—Anna Vanderlip
Mattice—Ronald Begin
Ramore—Barbara Cameron; Cleo Hebert
Haileybury—Neil Sheppard
North Bay—Joseph Williams
Bracebridge—Keith Moore
Maple—Richard Sampson
Ancaster—Aubrey Marshall
Grafton—George Crumback
Kingston—Gary Peck
Candiac—Jim Fradette

Front Cover

Drilling and preparing for blasting and clearing of right-of-way in late March on the new 40.3 km of 168.3 mm diameter pipeline from TransCanada's existing main line, near North Bay, to Temiscaming on the Ontario-Quebec border. Clearing recommenced at the end of May and construction of line should begin in late June.

Published for the employees of TransCanada PipeLines and their families by the Public Affairs Department.

Publications Supervisor: **C. B. Tucker**

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Member International Association of Business Communicators

TransCanada to pay 66th consecutive dividend on common shares

On June 4, the Board of Directors of TransCanada PipeLines declared a quarterly dividend of 29 cents per share on the company's common shares for the quarter ending June 30, 1980. This will be the 66th consecutive dividend paid by TransCanada on its common shares.

The dividend will be payable on July 31, 1980, to shareholders of record at the close of business on June 30, 1980.

TransCanada's Board of Directors meeting in Calgary, also declared the regular dividends on preferred shares for the quarter ending August 1, 1980. The preferred dividends are payable August 1, 1980, to shareholders of record at the close of business June 30, 1980.

Dividend No. 57 was declared on \$2.80 Cumulative Redeemable First Preferred Shares in the amount of 70 cents per share.

Dividend No. 34 was declared on \$2.65 Cumulative Redeemable Convertible Second Preferred Shares Series A in the amount of 66¼ cents per share.

Dividend No. 23 was declared on \$4.50 Cumulative Redeemable Retractable First Preferred Shares Series B in the amount of \$1.125 per share.

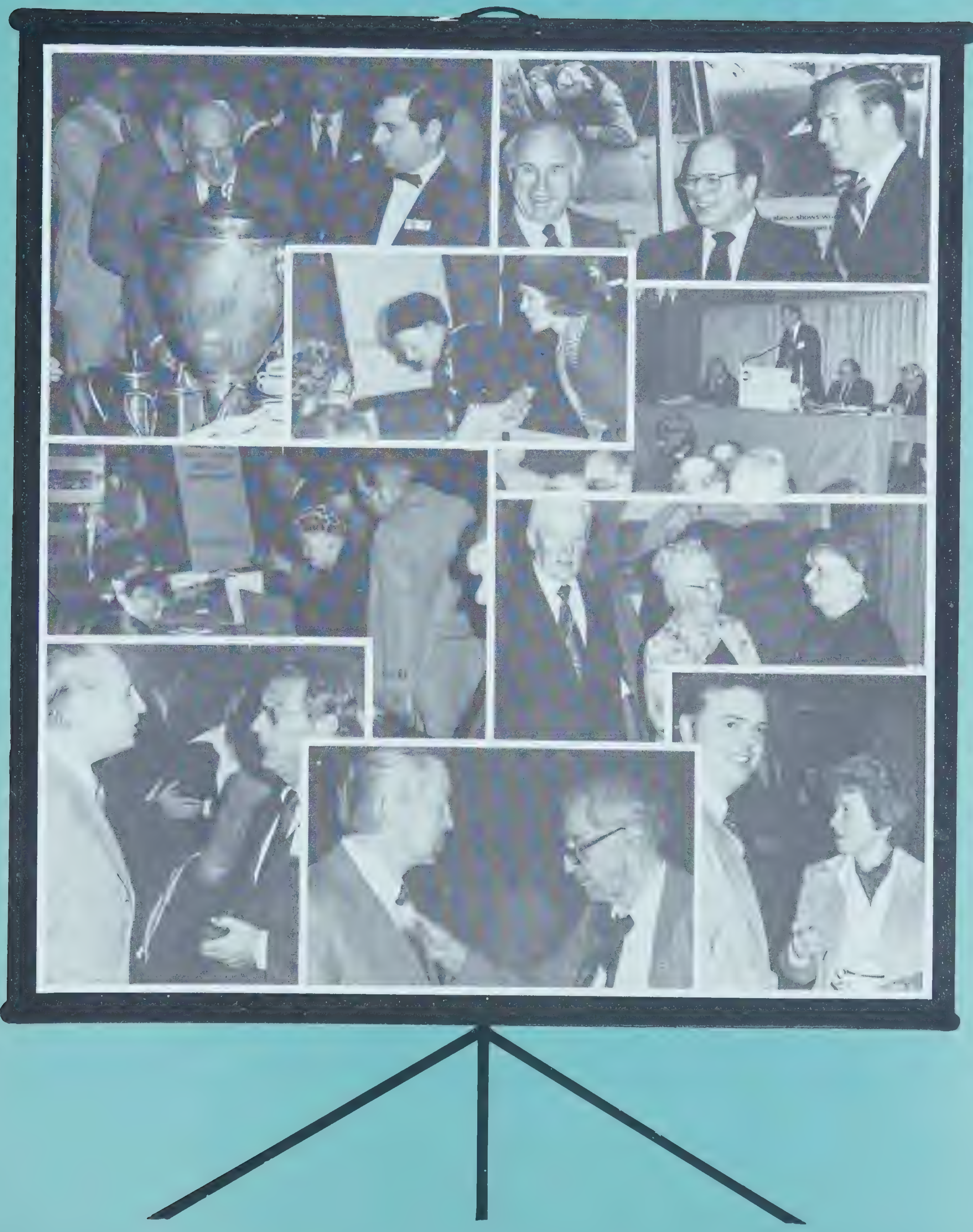
Directors authorize sale of Note issue to Union Bank of Switzerland

At its meeting in Calgary on June 4, the Board of Directors of TransCanada PipeLines authorized the sale to Union Bank of Switzerland an issue of 100,000,000 Swiss Francs principal amount of Notes. At the present rate of exchange, this represents approximately \$70,000,000 Canadian.

The Notes will have a six-year maturity and will bear interest at the rate of 5¾% per annum. The sale of the Notes is subject to approval of the Swiss National Bank.

TransCanada will use the proceeds of the Note issue to repay a portion of bank indebtedness incurred by the company in connection with the acquisition of oil and gas properties.

REPORT TO EMPLOYEES



Annual Report Reviewed

Company President and Chief Executive Officer R. R. Latimer began the Annual and Special General Meeting of Shareholders of TransCanada PipeLines by saying a few words about James W. Kerr, Company Consultant and Director.

He said that Mr. Kerr had addressed TransCanada's annual meetings ever since 1959. Mr. Latimer thanked Mr. Kerr, on behalf of all shareholders, for 21 years of devoted service to TransCanada. He said that TransCanada is where it is today because of Mr. Kerr's efforts.

"Under Mr. Kerr's leadership, this company developed into one of the country's largest and most technically advanced gas utilities," commented Mr. Latimer.

Mr. Latimer reported that earnings per share were down slightly from $2.20 to $2.16. However, the important measure of "funds provided from operations" increased sharply to $4.93 per share from $3.70 in 1978. It is this measure that fully reflects the company's strength and capability to provide for future growth of its transportation system and to participate to the fullest degree in achieving Canada's national energy objectives.

Donna Cox of Montreal Trust, gives last minute instructions on registration of shareholders at the Annual and Special General Meeting of Shareholders at the Royal York Hotel.

"This company has reached a stage in its development when it is very timely that we not only extend our system but that we diversify our operations. But our first job is to help the producers find new markets for the tremendous volumes of natural gas they have found," said Mr. Latimer.

"We are planning to expand natural gas into all the areas of Canada east of Alberta where it is economic for the producer. In the immediate future, we anticipate a major expansion into the province of Quebec through a 50% ownership in Trans Quebec & Maritimes Pipeline. When this eastern extension is fully developed, we estimate that new natural gas sales will exceed 7.1 x $10^9 m^3$ (250 billion cubic feet) of

Highlights —

	1979	1978
Operations	**($000)**	($000)
Operating revenues	**2,580,972**	2,193,213
Net income	**94,010**	95,099
Funds provided from operations	**198,896**	147,905
Dividends declared		
Preferred shares	**6,813**	7,132
Common shares	**46,890**	42,448
Common share statistics		
Net income		
Basic	$ **2.16**	$ 2.20
Fully diluted	**2.14**	2.18
Funds provided from operations	**4.93**	3.70
Dividends declared	**1.16**	1.06 1/4
Plant, property and equipment (gross)	**($000)**	($000)
Gas transmission plant	**1,811,490**	1,766,893
Oil and gas properties	**317,040**	—
Gas delivered for sale and transportation (million of cubic metres)		
Annual volume	**33 852**	32 808

Executive Vice-President, J. M. Cameron, right, discusses a detail in the Annual Report with Edna Crawford, Corporate Secretary, Union Gas.

Reviewing Annual Report with employees at Commerce Hall are: George W. Woods, Vice-Chairman and Chief Operating Officer, at podium, and K. G. Whiteside, Vice-President and Controller.

gas per year, or about 17 x $10^6 m^3$ (600,000 Mcf) each day. We are also studying new sales laterals in Manitoba and Ontario to serve areas which do not now have natural gas.

"There is also a need to provide additional facilities on our existing system, and to support the creation of new pipeline facilities into the U.S. which will enable gas surplus to Canada's needs to be exported. We have agreed to acquire a 49% interest in the Foothills Pipelines (Saskatchewan) segment of the Alaska Pipeline system. We have also acquired 1 30% interest in the first phase of the Northern Border Pipeline project which will take gas at the Saskatchewan border through to Iowa for delivery to U.S. transmission companies."

Mr. Latimer said that these new and expanded pipeline facilities will provide a massive opportunity for additional profitable investment in the utility parts of TransCanada over the near-term.

TransCanada was able to negotiate a new 50% interest in the oil and gas properties which a subsidiary of Dow Chemical Company of Canada had acquired over the years in the onshore properties of Dome Petroleum. Dome has a large holding of oil and gas properties, the largest in Western Canada, it has an excellent record of exploration success, and it has a wealth of geological expertise. This partnership provides an opportunity for TransCanada at a time when the company is looking for it, and has the financial strength to exploit it.

This utilizes the company's financial strength in the search for new energy reserves and significantly increases Canadian-owned participation in the oil and gas industry in keeping with government objectives. This agreement will provide for future increased earnings for TransCanada's shareholders and a broader financial foundation to participate in the large pipeline and other transportation systems that will be required for frontier energy development.

Mr. Latimer made a plea that the federal and provincial governments move to support the displacement of imported oil with Western Canadian natural gas. This displacement is a vital move towards national self-sufficiency. There is wide agreement that the use of natural gas in Canada should be expanded.

Mr. Latimer said that one of the most vital factors in Canada's future energy outlook will be the ability to transport frontier energy resources to southern markets. TransCanada experts to participate in other segments of the Alaska pipeline project, and to participate in other northern pipelines and transportation systems. TransCanada has an immense reservoir of transportation knowledge through its participation in the past in Canadian Arctic Gas, in ice and LNG carrier research in the Arctic, and through its participation in the Polar Gas Project.

Transcanada will be increasingly active in the energy transportation field as Canadian frontier energy sources become viable.

Through Great Lakes Gas Transmission, TransCanada already has substantial and profitable investment in the United States. This United States investment will increase through participation in the prebuild portion of the Northern Border Project, and later in the second phase of that project.

In Canada, both the utility and non-utility aspects of the business will continue to grow as the company expands its contribution to the solution of Canada's energy problems. The company's hope during the 1980's is to make TransCanada a diversified resource-oriented company with the financial muscle required to play a significant role in the projects of the 1980's and 1990's.

"We do not expect things to be easy—but we are optimistic," said Mr. Latimer.

In addition to a review of financial sections of the Annual Report, employees were shown the audio-visual presentation "An Energy Overview for the 1980's". This presentation shows unless something is done, the world—and Canada, will face an energy crisis in the mid to late 1980's.

APPOINTMENTS:
Right-of-way and Environmental Affairs Department

D. S. Hammond

D. S. Hammond was appointed Supervisor, Right-of-Way. Mr. Hammond joined TransCanada's Engineering and Operations department in 1965 as a Draftsman, was transferred to the Right-of-Way department in 1974 and progressed to his present position of Office Supervisor, Right-of-Way and Environmental Affairs in 1977.

Bernadette Delaney

Bernadette Delaney was appointed Office Supervisor, Right-of-Way and Environmental Affairs. Miss Delaney joined TransCanada in 1957 as a Secretary and progressed to her present position of Executive Secretary in 1967.

G. M. Hugh, Vice-President, Engineering and Operations, advised that Mr. Hammond and Miss Delaney will report to W. R. Milne, Assistant Manager, Right-of-Way and Environmental Affairs.

Tomatoes and cucumbers from the experimental greenhouse near Kincardine—marketed in Ontario.

TransCanada a partner in project

PRODUCE FROM AGRIPARK GREENHOUSE ALREADY BEEN MARKETED IN ONTARIO

We all know that TransCanada is becoming more diversified. The company's recent involvement in oil and gas exploration and development is an example. But tomatoes and cucumbers?

Yes. TransCanada has an interest in tomatoes and cucumbers through its participation in the Bruce Agripark project—an experimental greenhouse venture near Kincardine, Ontario.

Shareholders in the original $500,000 investment include The Consumers' Gas Company, Weston Energy Resources Ltd., the Ontario Energy Corporation, TransCanada PipeLines and two local companies, Huron Ridge Ltd. and Anderson Flax Products.

Tomatoes and cucumbers which were grown in the one-acre greenhouse have already found their was to market in southern Ontario.

The fact that the first crop matured in the fall and winter months ended speculation that the Kincardine site would not be conducive to year-round hothouse growing.

Promoters of the scheme say the tomatoes and cucumbers grown at the test greenhouse have more color and taste than produce obtained from California and Mexico. The reason for this is because the crop can be picked later in the maturing process.

The test greenhouse is heated by conventional sources, however, the consortium will ultimately use the waste hot water from the nearby Ontario Hydro Bruce Nuclear Generating Station for the full-scale project.

Development plans call for 36 acres a year to come into production over the next four years for a first-phase total of 144 acres under glass. A fish farm is also being considered for the complex.

Art Douloff, who is acting as Project Manager for TransCanada in the Bruce Agripark consortium, says that the total estimated cost of the completed first phase is $46 million. Transcanada's share would be approximately $5 million.

George Oldfield advises Retirement takes planning

By DENNIS BROWN

George Oldfield believes that it is never too late to learn and that one should enjoy oneself while one can.

George retired from TransCanada in March, 1973, when he was statistician in Construction Planning and Pipeline Design in the company's Toronto office. He joined TransCanada in 1958 after an initial career with International Petroleum in Talara, Peru. He was first in the TransCanada Sales department and later took on the key role of coordinating all the paper work for the various departments involved in rate cases, construction applications and other hearings before the National Energy Board.

> **WHERE ARE THEY NOW?**
>
> This is another in the series of interviews with TransCanada retirees, written by a recent retiree, Dennis Brown.
>
> Mr. Brown is conducting personal interviews except where distance makes this impossible. He would be pleased to hear from retirees outside Toronto, mentioning hobbies or jobs now taking the place of working for TransCanada.
>
> Drop a line to Dennis Brown, in care of Along The Line, and if possible enclose a recent photograph.

Now living in Niagara-on-the Lake, 20 km from Niagara Falls, Ont., George is no more enthused about retirement than he was almost 25 years ago when he retired from International Pete.

"If you are mentally and physically alert then it becomes extremely difficult to move into slow gear, unless you have a stimulating hobby or other exciting interests", George commented recently. "People going into retirement should plan to enjoy themselves to the full because they will find they haven't the time to do all the things they wish to do. Retirement takes planning".

Part of that planning is now made possible by the TransCanada Retirement Communication Program, initiated in March, 1976. It is designed to enlighten employees on what to expect when they retire, both financially and mentally.

This year the program will cover all employees with 10 years to go until retirement. They will also be invited to voluntary private counselling by the producers of the course, Reed Stenhouse Associates Ltd. TransCanada pays all employee expenses incurred in connection with the program. "A project such as this can mean a great deal to those about to take the plunge", George commented.

After taking the plunge himself, George settled down to gardening, golfing and updating his coin and stamp collections. Trips between Peru and Canada and between Oakville, Ont., where he earlier lived, and the TransCanada office, satisfied any lingering desire for travel.

Feeling that one can never learn too much, George embarked on a new educational program for himself. He took a course in banking at the University of Toronto, and followed this with a course in statistics involving plenty of charts and graphs, one of his specialties while at TransCanada. With time still hanging heavy, he took on an evening course in philosophy.

As he has done for years, George still closely follows the world financial news. His studies in this area have paid dividends.

Isobel, George's wife, is expanding her creative talents. Having closed her fabric and drapery business she is now studying the art of staining glass—for windows and Tiffany lamps.

George Oldfield hasn't changed much since this photograph was taken at his retirement party in March, 1973.

Roger, the Oldfield's son, now lives in California.

George, incidentally, has another reason for not being too enthused about more travel. Last November he was involved in an accident at a commuter train station. He was forcibly thrown to the ground in a rush-hour crowd and suffered two broken ribs and a cracked hip. He was in hospital for three weeks but it was after he was released that delayed shock set in. It took almost five months to regain his health and to start looking for another course to study.

During the retirement party, Bob and Freda were presented with a miniature Rolls-Royce model car. Bob spends his spare time rebuilding MG cars and this is perhaps a hint to set his sights higher.

Bob and Freda Payne 'Set Sail' for Nova Scotia

Sub-District Supervisor Robert Payne retired on May 1, after nearly 21 years of service, having joined TransCanada on July 6, 1959.

Bob joined the company as a welder at Victoria Square when this facility consisted of a small garage. He worked at Station 130, Maple before being moved to Station 136, Grafton, where he spent the past 15 years.

A retirement party to honor Bob and Freda Payne was held April 19 at the Little Lake Pavilion, in Brighton, Ontario. Attending were employees and friends from Grafton, Belleville, Eastern Area, Toronto office, as well as friends from the local community and Curling Club.

Sub-District Manager George Crumback emceed the evening. He introduced newly appointed Eastern Area Manager, Gavin Couper, and his wife, Hazel. Gavin told some interesting anecdotes involving Bob, in which Freda Payne figured prominently.

Mr. Couper read telegrams of congratulations received from District 13 Manager Lewis Kopp and Western Area Maintenance Coordinator Bud Ritchie, who worked with Bob Payne when he started with TransCanada.

G. M. Hugh, Vice-President, Engineering and Operations, was on hand to offer Bob congratulations and present him with a retirement scroll on behalf of the Management and staff of TransCanada.

Irv and Mary Fee were also in attendance and the newly appointed Manager, Construction Training, also recalled memories of earlier times with Bob and Freda.

Other speakers were District Technician Larry Quinton, who presented a washboard to Bob and Grafton Mainliner Club President Gregg Simmons, who presented the Paynes with a gift of a carved tray and crystal glasses.

Bob and Freda recently acquired a house-trailer and plan to live in it this summer and use it on trips to their cottage on the west arm of Lake Nipissing near North Bay, Ontario, and on other travel outings.

Bob also has a sail boat, having become interested in sailing six or seven years ago and is looking forward to sailing in Nova Scotia. He is an active curler, while his wife Freda, is an avid reader.

OBITUARY

This Hassell painting of "Unloading at Resolute Bay", Cornwallis Island, Northwest Territories, was used on TransCanada's 1978 Calendar.

Hilton Hassell

Hilton MacDonald Hassell, RCA, OSA, a well-known Canadian artist who painted many works for TransCanada PipeLines and Polar Gas, died on May 2, after a brief illness.

In 1973, as a guest of TransCanada, he painted across the Prairies and Northern Ontario. He also painted aboard the research vessel Percy M. Crosbie in the eastern high arctic. From these trips, a collection of about 30 works hang in the offices of TransCanada and Polar Gas.

Mr. Hassell was born in Lachine, Quebec, in 1910. At an early age, his parents moved to Ontario and he later studied at the Ontario College of Art and also studied in London, England. He considered himself mainly self-taught, having sketched and painted in the woods and fields near his home in Port Credit.

Mr. Hassell had one-man shows in Toronto, Calgary, Halifax, Ottawa and Winnipeg. He was in group exhibitions from coast to coast and his works are in many public and private collections across Canada, in England, the United States and Europe.

He is survived by his wife Valerie, and a son and daughter.

Board of Directors approve new structure for TransCanada

Radcliffe R. Latimer,
President and Chief Executive Officer.

A major restructuring of TransCanada was announced by company President and Chief Executive Officer Radcliffe R. Latimer on June 4, following approval by the Board of Directors at a meeting in Calgary.

Mr. Latimer said, "The restructuring reflects our desire to diversify our operations for meeting the opportunities of the 1980s and at the same time to keep our company abreast of the rapid growth in the transmission industry.

"TransCanada has had few major changes in its corporate structure since commencing operations in the mid-1950s. Since our company was basically a utility, extensive changes were not necessary. However, the challenges and opportunities that face energy companies in the next decade suggest a basic change is needed now."

The company is now divided into three major divisions: Utility, Alberta and TCPL Resources. Also created under this restructuring is a Corporate Staff Organization which will provide direction and support for the divisions. A separate function of Finance and Treasurer was established as well.

Mr. Latimer said that the principal area of TransCanada would continue to be the Utility Division. It will be

George W. Woods,
Vice Chairman and Chief Operating Officer will head the Utility Division.

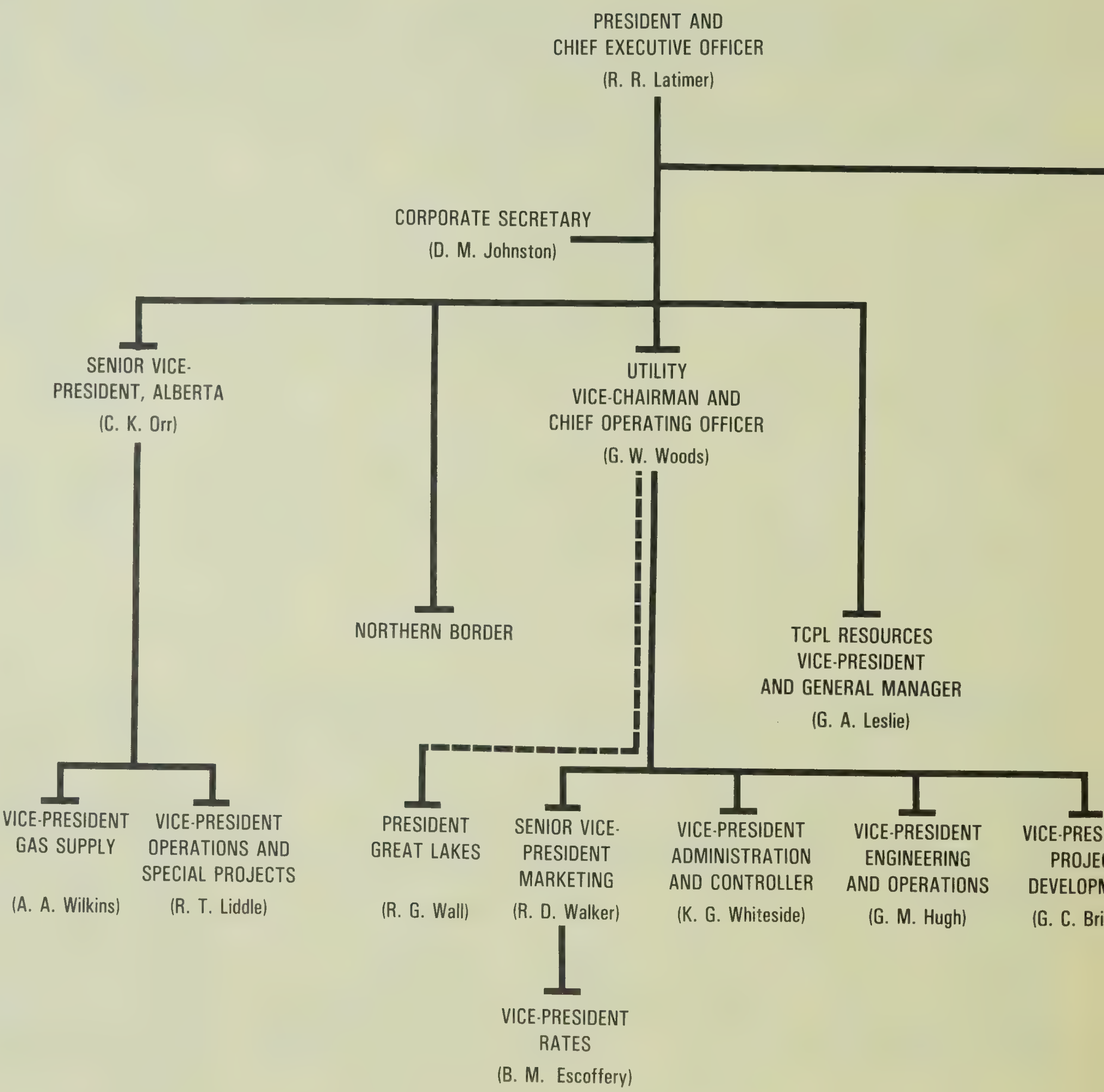
C. Kennedy Orr,
Vice President, Alberta Affairs, becomes Senior Vice President, Alberta Division.

Gordon A. Leslie,
Vice President, Customer Relations and Planning, was appointed Vice President, and General Manager, TCPL Resources. Mr. Leslie will retain his title as Vice President, TransCanada PipeLines.

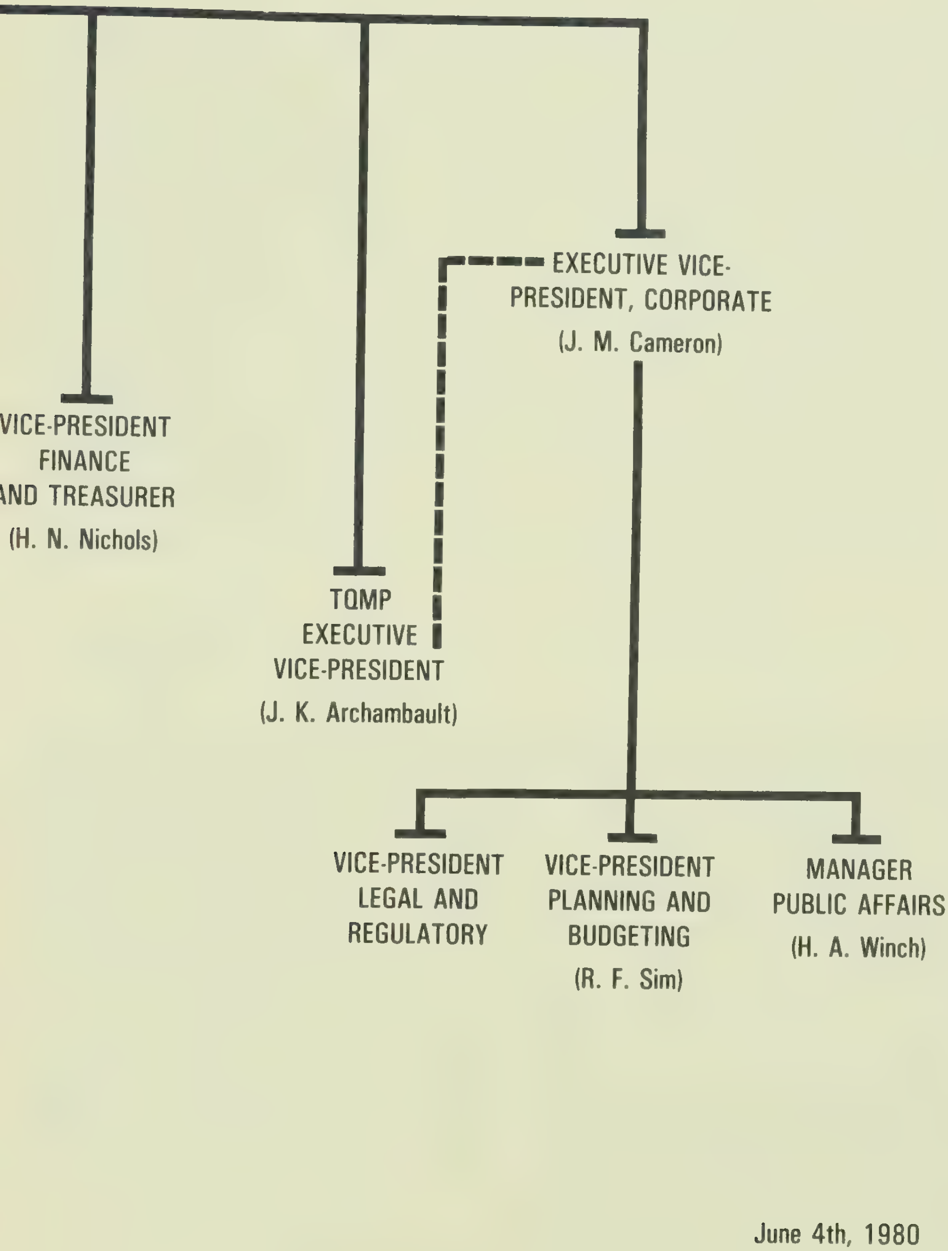
James M. Cameron,
Executive Vice President, becomes Executive Vice President, Corporate.

H. Neil Nichols,
Vice President and Treasurer, was appointed Vice President, Finance and Treasurer.

New structure of TransCan



a PipeLines



responsible for the operation of the utility outside the province of Alberta. G. W. Woods, Vice Chairman and Chief Operating Officer, will head the division and will report to Mr. Latimer.

Of particular significance is the creation of the new position of Senior Vice President, Marketing, which will be filled by R. D. Walker, reporting to Mr. Woods. Mr. Walker will be responsible for Sales, Forecasting and Energy Projects. Also reporting to Mr. Walker will be B. M. Escoffery, Vice President, Rates.

Mr. Latimer said that the setting up of this marketing function in the Utility Division recognizes the special importance TransCanada attaches to the aggressive selling of gas in the 1980s.

Also reporting to Mr. Woods in the Utility Division will be:

G. C. Britton
Vice President, Project Development

G. M. Hugh
Vice President, Engineering and Operations

K. G. Whiteside
Vice President, Administration and Controller.

Mr. Latimer explained that the Alberta Division will be responsible for all company activity in that province, with the exception of TCPL Resources, with emphasis on gas supply and relations with the provincial government. C. K. Orr, Senior Vice President, Alberta, will direct the division.

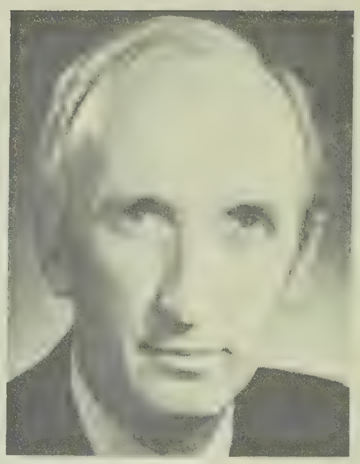
Reporting to Mr. Orr are:

R. T. Liddle
Vice President, Operations and Special Projects

A. A. Wilkins
Vice President, Gas Supply.

TCPL Resources will be responsible for the company's investment in oil and gas exploration, development and production. It will be headquartered in Calgary under the direction of G. A. Leslie, Vice President and General Manager. Mr. Leslie will retain his position as Vice President, TransCanada PipeLines.

Richard D. Walker,
Vice President, Gas Transmission, becomes Senior Vice President, Marketing, Utility Division.



George C. Britton,
Vice President, Project Development, becomes Vice President, Project Development, Utility Division.

Bruce M. Escoffery,
Vice President, Rates, is now Vice President, Rates, Utility Division.

George M. Hugh,
Vice President, Engineering and Operations, is now Vice President, Engineering and Operations, Utility Division.

The Corporate staff will be directed by J. M. Cameron who has been named Executive Vice President, Corporate. Reporting to Mr. Cameron will be the function of Legal and Regulatory and:

R. F. Sim
Vice President, Planning and Budgeting

H. A. Winch
Manager, Public Affairs.

H. N. Nichols was appointed Vice President, Finance and Treasurer.

Messrs. Cameron, Leslie, Nichols, Orr and Woods report to Mr. Latimer.

Coincident with this restructuring was the announcement that J. K. Archambault has been seconded to Trans Quebec and Maritimes Pipelines as Executive Vice President. Alberta Gas Trunk Line, the other partner in TQMP, has also appointed an Executive Vice President. TQMP is the company established to extend TransCanada's system east of Montreal.

"This new organization builds on the unique expertise and special skills that have been developed by TransCanada over the past 22 years.

"I am fully confident these changes are the type of building blocks we need to assume the kind of leadership we will require in the next decade," Mr. Latimer said.

Robert T. Liddle,
Manager, Alberta Affairs, is now Vice President, Operations and Special Projects, Alberta Division.

Raymond F. Sim,
Vice President, Administration and Assistant Secretary, becomes Vice President, Planning and Budgeting, Corporate.

Kenneth G. Whiteside,
Vice President and Controller, becomes Vice President, Administration and Controller, Utility Division.

Arthur A. Wilkins,
Vice President, Gas Supply, becomes Vice President, Gas Supply, Alberta Division.

John K. Archambault,
Vice President and General Counsel, was appointed Executive Vice President, Trans Quebec and Maritimes Pipelines. Mr. Archambault will retain his title as Vice President, TransCanada PipeLines.

cross country

CALGARY

Calgary office employees surprised Rick Beck from Accounting with a cake to help celebrate his 25th wedding anniversary. When news of free cake spread, Rick was quickly flooded with old friends, new friends and a few dozen he hadn't met yet. Rick's wife Therese, was unable to attend the impromptu celebration and it is not known if a slice of cake was salvaged for her from the swarm of hungry well-wishers.

Gathered in Rick's office to congratulate Rick and claim a piece of cake are: left to right; John Thorburn, Terry Ofremchuk, Merv Pilling, Rob McGregor, Carol Vollmer, Rick, Doreen Davies, Dave Stranks, Moe Palmer, Al Hudson and Ed Bozak.

Linda Heffer (Data Processing) gives the ice while opponent John Thorburn (Public Affairs) studies the situation.

Calgary Mainliner Club holds Curling Tournament

Club members fled in panic deserting a handful of unsuspecting volunteer service staff alone to face 70 Calgary Mainliners possessed by a searing desire to throw rocks.

The North Hill Curling Club braced itself in late April for the invasion which proceeded smoothly until 12 teams took to the ice leaving another four teams with the bye in the lounge. Uniformity and quiet patience were quickly forgotten in a blaze of distinctive styles and a complete disregard for peace and quiet.

Competitors donned a variety of sweaters, hockey insignia, jeans, coats and the occasional hat as each began the quest for the trophy emblematic of Calgary Mainliner curling supremacy.

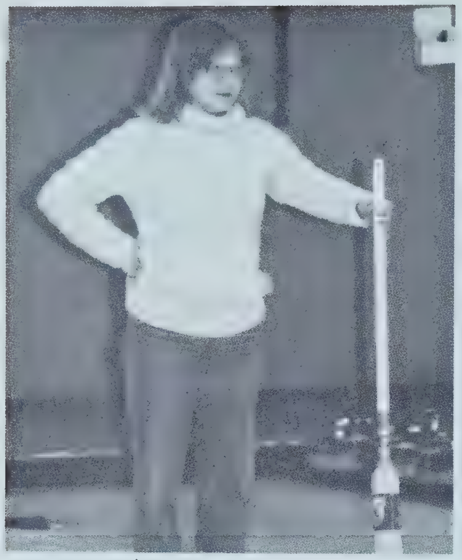
The mixed competition brought together several styles in the hack ranging from the long flowing glide of the seasoned curler to the short backswing and closed-eyed hopefulness of the novice.

Occasionally the rink reverberated with the rythmic thumping of cloth-covered corn brooms working the ice and echoing years of experience. Those carrying the smaller European brush-type broom merely cast disdainful glances towards the show-offs.

Following the first round the teams shook hands and retired, at the run, to the lounge where the remaining four teams awaited their first taste of action. Another round was quickly underway with teams throwing rocks, sweeping, shouting and mulling over shots under the gaze of those with the bye firmly ensconced in the lounge overhead.

After five rounds of competition it came down to two teams; skip Gerry Marshall (Reserves) and his team of Greg Hay (Deliverability), Dennis Anderson and Trudy Van Sprang; and skip Barry Luft (Deliverability) and his team of Kelly Watson (Operations), Alice Roest and Violet Mettler.

Skip Gerry Marshall (Reserves) flashes tournament winning form as he sweeps a guard into perfect position.



Nancy Dapp (Operations) models a sweater and gives the ice to a teammate in the hack.

When the dust had settled the Marshall team emerged victorious to claim and carry off the glittering hardware.

Honors were also bestowed upon a team led by skip Ron Wickwire (Operations) and his colleagues Ilene Schmaltz (Operations), Linda Anderson and Ruth Lomenda. The Wickwire team managed to grab defeat from the jaws of victory and claim last place in the 16-team tournament.

Their efforts were publicly acknowledged when team members were presented with individual trophies bearing a remarkable resemblance to the hind quarters of a Kentucky Derby contender.

The remainder of the evening was spent in considerable merry making featuring a feast of chili, toast and home baked pies provided by the courageous volunteer service staff of the North Hill Curling Club.

Merv Pilling (Drafting) kneels for a closer look at a close measurement.

HERBERT

Harold and Ruth Chang from Station 9, Herbert, Saskatchewan, were greeted with a standing ovation as they entered the Chinese Garden Restaurant, in Swift Current, with Glen and Irene McKean.

The occasion was a farewell dinner for Harold and Ruth who are moving to Station 17, Regina, where Harold has been appointed Sub-District Manager.

Most of the Herbert station employees and wives were in attendance for the presentation of an inscribed serving tray to Mr. and Mrs. Chan; Harold was also presented with a briefcase from his fellow employees.

Ruth and Harold Chan received a standing ovation on entering party held in their honor in Swift Current.

IGNACE

The Mainliner Club of Station 58, Ignace, Ontario held its annual curling bonspiel on March 22 at the local Ignace Arena complex. The winner of the tournament was the Greg Wallin rink.

The club members and their families ended the enjoyable day with a pot luck supper and dance.

District 58 employee Kay Peddle, left, appears to give the rock an extra boost.

Terri Shyska, left, and Michelle Bruvall, take a breather from competition.

Discussing their curling strategy are, from left; Randy Dean, Roy Fuller and Bev McLellan.

Reid Trophy winners: left to right, Jean Baily, Sandy Moffatt, Dennis Schwark and Ward Matheson.

MOOSOMIN

The second annual Western Area bonspiel was held in Moosomin on February 1, 2, and 3. Again the bonspiel was a great success, with 24 rinks participating.

The Reid Trophy was won by Dennis Schwark of Station 41, Ile des Chenes, and his rink of Jean Baily, Sandy Moffatt, and Ward Matheson all of Station 25, Moosomin.

The District Manager's Trophy was won by Don Keast and his rink. The Denman Knox Trophy was won by the Terry Redfern rink.

UPSALA

Employees at Station 62, Upsala, Ontario were busy, athletically, this winter. Their sports events ranged from varied curling bonspiels to the Upsala Public School Annual Carnival.

At the carnival, prizes were awarded to students having the highest total points. Girls' Junior Class Prize was won by Kerry-Leigh Siegel, daughter of Werner Siegel, Sub-District Supervisor. Boys' Intermediate Class was won by Charles Horne, son of Chuck Horne, Technician.

This year, the Upsala community made the addition of hockey teams to their existing activities. The local residents formed both a senior and Peewee hockey team this winter. Chuck Horne, Technician, coached the Peewees and assisted with the senior team along with Glen Gonyan, Utility, and Roland Jeffries, Maintenance.

Fortunately, the teams were able to play against other teams from Thunder Bay, Roslyn, Atikoken and Ignace.

KENORA

Sub-District Manager of Station 49, Art McMillan, valiantly matched a $200 donation given to the Handi Transit by the local Shrine Club. Handi Transit is a bus service offered to the senior citizens and handicapped people in the Kenora area.

Mr. McMillan stated that he made his generous contribution as an "incentive" to other members of the club.

MATTICE

Mattice correspondent Ron Begin thought our readers would be interested in knowing that the tropics can be moved to the Mattice area of Northern Ontario.

During the winter, a rather tropical looking plant, called a dieffenbachia, grew so tall, it was about to go through the ceiling of the District 92 office.

To remedy the situation, the plant was cut down to size by a processus or air layering operation and transplanted.

A processus was employed to shorten this dieffenbachia plant at the Mattice District office.

The transplanted dieffenbachia may now continue its upward growth.

RAMORE

Mainliner Club President, Don Gourley on right, presents First Place trophy to: right to left: Skip, Gabe Camirand; Vice skip, Lucienne Camirand; Lead, Dez Labreche and Second Yves Labreche.

Second place finishers were, right to left: Skip, Bob Boisvert; Vice skip, Noella Boisvert; Second, William O'Connor and Lead, Jeannine O'Connor.

Third place finishers were, right to left: Second, Eddy Shannon; Lead, Sharon Shannon; Skip, Barbara Graham and Vice skip, Jamie Graham.

Station 105, Ramore, recently held its Annual Mixed Curling Bonspiel at the Matheson Curling Club.

This year 16 teams participated in the bonspiel with the Gabe Camirand rink finishing in "First Place" overall.

Second place finishers were the Bob Boisvert rink, with third place going to the Barbara Graham rink.

Besides a good day of curling, participants were treated to a beautiful hip of beef supper along with a dance to cap off a full day of activities.

Danny Cameron, son of welder John Cameron, of Station 105, Ramore, collected the most money in the recent Minor Hockey League Skate-a-thon. Through Danny's hard work, he was able to present the Minor Hockey League with a one hundred dollar bill.
Congratulations to Danny for the effort you put forth in achieving this goal.

Technician Rene Rheault, of Station 105, Ramore, along with a small group of friends, constructed this float which won "First Place" in the Kirkland Lake Winter Carnival and "Second Place" in the Ramore Winter Carnival.

people

Hello To:

Briscoe, J. M., Senior Pilot, Aviation, Toronto.
Brogan, S. C. (Miss), Secretary I, Public Affairs, Calgary.
Bulger, H. E., (Mrs), Senior Secretary, Polar Gas Project, Toronto.
Chan, Stephen, Graduate Engineer, Pipeline Facilities, Toronto.
Coo, Dennis, Engineering Assistant, Gas Supply, Deliverability, Calgary.
DeVille, B. R., Senior Clerk, Gas Supply, Statistics, Calgary.
Dower, A. C., Systems Analyst, Alberta Affairs, Data Processing, Calgary.
Fockler, S. C., Technician II, Eng/Ops, Victoria Square.
Jakab, L. K. (Ms), Clerk, Gas Supply, Reserves, Calgary.
Kanyard, S. G., Senior Pilot, Aviation, Toronto.
Kosten, D. P., Engineering Assistant, Gas Supply, Deliverability, Calgary.
Lee, D. C., Senior Engineer, Gas Supply, Eng/Ops, Calgary.
Lemieux, P. A., Maintenance, Eng/Ops, Geraldton.
Leung, H. L., Engineer II, Gas Supply, Special Projects, Calgary.
Lu, Paul, Senior Draftsperson, Drafting, Station Design, Toronto.
MacDonald, John, Graduate Geologist, Gas Supply, Reserves, Calgary.
MacRae, I. D., Senior Clerk, Sales, Toronto.
McElligott, J. A., Assistant Technician, Regulatory Approvals & Survey, Toronto.
Meldrum, S. R., Clerk, Treasury, Toronto.
Mowat, F. S., Technician I, Eng/Ops, Toronto.
Montgomery, G. M., Senior Pilot, Aviation, Toronto.
Newman, W. L., Party Chief, Eng/Ops, Western Area.
Norberg, G. J. R., Regional Coordinator, Polar Gas Project, N.W.T.
Salmi, Lori (Miss), Clerk, Eng/Ops, Geraldton.
Soteros, Alexander, Supervisor, Project Development, Data Processing, Alberta Affairs, Calgary.
Turubchuk, Donald, Maintenance, Eng/Ops, Thunder Bay.
Williamson, J. M., Graduate Engineer, Gas Supply, Gas Control, Calgary.
Winter, E. A. (Miss), Project Librarian, Alberta Affairs, Data Processing, Calgary.
Zappitelli, Claude, Maintenance, Eng/Ops, Ignace.

Changes—March

Aubrey, G. B., Programmer Analyst to Systems Analyst, Alberta Affairs & Gas Supply, Calgary.
Baily, N. A., Sub-District Manager to District Manager, Eng/Ops, Moosomin.
Britton, G. A., Operator to Engineering Assistant, Alberta Affairs & Gas Supply, Calgary.
Cooney, D. J. (Mrs), Systems Analyst to Senior Systems Analyst, Systems & Data Processing, Toronto.
Creese, T. A., Maintenance to Utility, Eng/Ops, Geraldton.
Delaney, B. (Miss), Executive Secretary, Administration to Office Supervisor, Right-of-Way and Environmental Affairs, Toronto.
Demanins, R. L., Accountant to Senior Accountant, Accounting, Toronto.
Diemert, R. (Mrs), Clerk to Senior Clerk, Alberta Affairs & Gas Supply, Calgary.
Graham, R. R., Senior Technician, Eng/Ops Compression to Eng/Ops Pipeline, Toronto.
Griffiths, H. P., Temporary Clerk to Clerk, Eng/Ops Pipeline, Toronto.
Hammond, D. S., Office Supervisor to Supervisor, Right-of-Way and Environmental Affairs, Toronto.
Hay, G., Engineer I to Engineer II, Alberta Affairs & Gas Supply, Calgary.
Hudson, R. G., Clerk, Office Services to Senior Clerk, Energy Studies, Toronto.
Hulse, B. E., Manager, Sales Contracts to Manager, Sales, Toronto.
Johnston, E. L. (Mrs), Accountant to Assistant Banking Analyst, Treasury, Toronto.
Kowalchuk, G. G., Systems Analyst to Senior Systems Analyst, Alberta Affairs & Gas Supply, Calgary.
Leeson, N., Engineering Assistant to Reserves Analyst, Alberta Affairs & Gas Supply, Calgary.
Massi, H. P., Utility to Technician 'E', Eng/Ops, Ramore.
Mior, L. R., Systems Analyst to Senior Systems Analyst, Systems & Data Processing, Toronto.
Moller, J., Engineer II to Senior Engineer, Eng/Ops Compression, Toronto.
Moore, K. F., Maintenance to Utility, Bracebridge.
Otis, B., Engineer II to Senior Engineer, Eng/Ops, Compression, Toronto.
Ottoson, E. C., Maintenance to Utility, Eng/Ops, Ignace.
Phillips, B. E. (Mrs), Senior Comptometer Operator to Senior Clerk, Accounting, Toronto.
Pop, G., Engineer I to Engineer II, Alberta Affairs & Gas Supply, Calgary.
Schmaltz, I. (Ms), Assistant Operator to Operator, Alberta Affairs & Gas Supply, Calgary.
Soares, G., Senior Regulatory Analyst to Economist, Alberta Affairs & Gas Supply, Calgary.
Soini, N. J., Temporary Clerk to Clerk, Eng/Ops Pipeline, Toronto.
Stevens, E. E. (Mrs), Senior Clerk to Executive Secretary, Polar Gas Project, Toronto.
Terroux, M., Programmer to Programmer Analyst, Alberta Affairs & Gas Supply, Calgary.

—April

Aubry, L. D., Assistant Supervisor, Administration to Supervisor, Operations Administration, Eng/Ops, Toronto.
Cameron, I. R., Supervising Engineer to Assistant Manager, Facilities Planning, Eng/Ops, Toronto.
Cataford, G. F., Supervising Engineer to Assistant Manager, Compression Design, Eng/Ops, Toronto.
Cortens, P., Senior Clerk, Eng/Ops Pipeline to Audit Assistant, Internal Audit, Toronto.
Dachuck, C. C. (Mrs), Secretary II to Word Processor Operator, Eng/Ops.
Deering, D. H., Insurance Analyst to Senior Insurance Analyst, Taxation and Insurance, Toronto.
Denham, M. K. (Mrs), Clerk to Senior Clerk, Printing, Toronto.
Durnin, M., Supervising Engineer to Assistant Manager, Pipeline Design, Eng/Ops, Toronto.
Etchells, L. (Mrs), Senior Clerk, Accounting to Office Services, Toronto.
Farmer, F. H., Supervising Engineer to Assistant Manager, Compression Facilities, Eng/Ops, Toronto.
Fee, I. H., Area Manager, Eastern Area, to Manager, Construction Training, Eng/Ops, Toronto.
Franklin, H. C. W., Manager, IPEL to Manager, Engineering Administration, Toronto.
French, H. A., Supervising Engineer to Assistant Manager, Pipeline Monitoring, Eng/Ops, Toronto.

Gale, S., Junior Programmer to Programmer, Alberta Affairs & Gas Supply, Calgary.
Gough, T. A., Assistant Manager Administration to Manager, Operations Administration, Toronto.
Grooms, R. A., Programmer to Programmer/Analyst, Systems & Data Processing, Toronto.
Heffer, L. (Mrs), Junior Programmer to Programmer, Alberta Affairs & Gas Supply, Calgary.
Ignacio, A., Draftsperson A to Senior Draftsperson, Eng/Ops Compression Toronto.
Jackson, N. H., Utility, Ile des Chenes to Inspector, Eng/Ops, Western Area.
Jamieson, T. M., Supervisor, Economic Studies to Assistant Manager, Economic Studies, Polar Gas Project, Toronto.
Jeffrey, D. J., Junior Accountant, Accounting to Property Tax Accountant, Taxation and Insurance, Toronto.
Jermyn, M. (Miss), Mag Card II Operator to Senior Mag Card II Operator, Printing, Toronto.
Jovanovic, M., Engineer II to Senior Engineer, Eng/Ops Compression, Toronto.
Lee, W. L. (Mrs), Executive Secretary to Administration Assistant, Pola gas Project, Toronto.
Ofremchuk, T. C., Senior Accountant to Accounting Analyst, Alberta Affairs & Gas Supply, Calgary.
O'Hare, D. A., Assistant Supervisor Administration to Supervisor, Contract Administration, Eng/Ops, Toronto.
Swain, J. (Mrs), Clerk to Senior Clerk, Printing, Toronto.
Thorsteinson, G. B., Planning Analyst, Energy Studies, Toronto to Energy Analyst, Alberta Affairs & Gas Supply, Calgary.
Walker, J. G., Supervising Engineer to Assistant Manager, Facilities Planning, Eng/Ops, Toronto.
Watkins, E. J., Engineering Designer, Polar Gas Project, Toronto to Coordinator, Office Services, Alberta Affairs & Gas Supply, Calgary.
Wong, J. C., Supervising Engineer to Assistant Manager, Pipeline Facilities, Eng/Ops, Toronto.
Yakichuk, A. (Mrs), Clerk to Senior Clerk, Printing, Toronto.

Terminations—March

Hill, J. M. (Mrs), Rates, Toronto.
Irwin, J. A. (Mrs), Polar Gas Project, Toronto.
Konkin, M. (Miss), Public Affairs, Calgary.
Miller, G., Alberta Affairs & Gas Supply, Calgary.
St. Louis, N. R. (Miss), Legal, Toronto.

—April

Batson, P., Alberta Affairs & Gas Supply, Calgary.
Gourbault, M. A., Public Affairs, Toronto.
Hay, G. T., Alberta Affairs & Gas Supply, Calgary.
Kearns, D., Alberta Affairs & Gas Supply, Calgary.
Lambert, G. (Miss), Public Affairs, Montreal.
Syme, B., Alberta Affairs & Gas Supply, Calgary.
Woychuk, O., Eng/Ops, Geraldton.

Marriages:

Brunette, J. A., (nee Mills), Gas Supply, Administration, Calgary, March 7.
Parkman, J. A., Eng/Ops, Mattice, March 8.

Births:

Deibert, L. W., Eng/Ops, Burstall, boy, Tyrell Troy, February 19.
Hickey, A. C., Accounting, Toronto, boy, Adam John , March 12.
Kolodrupski, J. M., Eng/Ops, Western Area, boy, John Alexander, March 5.
Leung, H. L., Gas Supply, Calgary, boy, Fook Long, April 14.
McKnight, D. J., Eng/Ops, Maple, girl, Sarah Jane, March 7.
Schissel, J. C., Gas Supply, Calgary, girl, Jane Lynn, April 23.
Whiteside, K. G., Treasury, Toronto, girl, Catherine Alexandra Tomima, December 10, 1979.
Young, D. J., Gas Supply, Calgary, boy, Brennan R., March 13.

Retirements

Ceponkus, P., Eng/Ops Compression, Toronto.
Evans, B. L. (Mrs), Alberta Affairs & Gas Supply, Calgary.
LaSage, E. J., Eng/Ops, Western Area.
Stookey, C. H., Eng/Ops, Western Area.
Taylor, J., Eng/Ops, Thunder Bay.

OBITUARIES

Terry A. Creese, of Station 80, Geraldton, died suddenly on April 16, 1980, at age 25.

Mr. Creese joined the company in March, 1977.

N. M. (Nick) Neuwirth died suddenly on May 3, 1980, at age 72.

Mr. Neuwirth joined TransCanada in 1957 in Central Area's Engineering Construction department. He worked in all three areas across the system before retiring on May 1, 1974.

Mr. Neuwirth's wife, Rose, predeceased him in 1977.

SERVICE AWARDS

5

years

R. C. Bowman
Accounting
Toronto
April 17

E. C. Ottoson
Eng/Ops
Ignace
April 1

M. A. Ross
Rates
Toronto
April 23

TORONTO

Getting away from downtown Toronto for a change, the Mainliner Club of Toronto held its spring dinner and dance at the charming Old Mill Restaurant in the west end of the city.

Some 217 Mainliners and guests enjoyed the excellent food and the dance music provided by the Circus Dance Band and disc jockey, Bill Bueckert, a summer student at Toronto office.

For many of the older employees, going to the Old Mill probably brought back fond memories. For more than 30 - 40 years, the old Mill has been a popular dinner-dance spot. It still maintains its old charm.

A date for Toronto Mainliners to jot down is the Zoo-Picnic day to be held Sunday, July 6, at the Metropolitan Toronto Zoo.

Mainliner Social Director Bev Brush enjoys a quiet moment with Larry Leslie.

On April 18, many friends of D. E. Reid, newly appointed Manager, Western Area, gathered at the Royal York Hotel to bid him good luck and farewell. The former Manager, Compression Facilities, was presented with a pipe by G. M. Hugh, Vice-President, Engineering and Operations. Dave and his family will reside in Winnipeg, Manitoba.

This happy group includes, from left: John Sedlar, Lori and Rob Dubien, Joy Harris, Ken and Lynne Kawall, Cindy Miller and Jody Sedlar.

Before Connie Leggett of Rates left to await the stork's arrival, the girls at Toronto office held a baby shower for her. Here, Beth Bryan, left, presents Connie with a car seat and bassinet. Connie will be returning to the Rates department.

Around the table, from left, are: Ken Foster, Mary and Ed Blanchet, Jim and Nina Harron, Peggy and Oland Sellars and Barb Griffett.

At this table are: from left, Lynda Griffin, Wyn and Carol Jones, Margaret and Alec Millar, Anne Taylor, Betty Saunders and Jim Griffin.

GRAFTON

A fire school was held for the Grafton station employees on May 6 with the assistance of Bob Stringer and Gary Kopp of Levitt Safety.

Continuing with the station's safety program eight more of the employees were taught the CPR (cardiopulmonary resuscitation) Basic Life Support course by Alex Wilson of Cobourg, Ontario.

Personnel Manager Peter Scheirich and Employment Supervisor John Epping visited Station 9 to show a film on the Annual Report—Energy Overview and answer employee questions. The visit proved of great benefit to all.

Employees of TransCanada PipeLines, Polar Gas and Great Lakes Gas Transmission Company, are invited to enter the Annual Photo Contest. The deadline for entries is September 26.

A cash prize of $75 will be awarded for the best entry in each of the four categories. Runner-up prizes of $25 will be awarded in each category. An additional $25 will be awarded for the 'best-in-the show.'

Categories

1. Children
2. Scenery, Plants and Still Life
3. Where I Live: Photographs taken within your own city, town or area. Any photographs which you feel portray the character or mood of your area
4. Miscellaneous

Color and Black and White

Either Black and White or Color photographs may be entered in all categories.

Contest Rules

A. You may enter a maximum of four photographs, but no more than two in a single category.

B. Each photo entered must be taken by the employee who submits it, during the past year.

C. Transparencies should be either 35 mm or 2¼ x 2 ¼ and must be mounted. Black and white prints should be 5 x 7 or larger.

D. A category will NOT be judged unless it contains entries from at least three employees.

E. No contestant may win in more than one of the four categories.

F. Print your name and address plus the category on the back of each print or on the frame of each slide. (On glass-mounted slides, use a small label.)

G. Address your entries to: Along The Line Photo Contest
TransCanada PipeLines
P.O. Box 54, Commerce Court West
Toronto, Ontario M5L 1C2

Package your entries securely and mark 'Photo—Do Not Bend' plainly on the outside of the envelope. Contest deadline is September 26.

along the line

SEPTEMBER, 1981

Along the line

Volume 25 No. 5, 1981

Correspondents

Burstall—Terry Redfern
Cabri—Roy Thomas
Herbert—Doug Osmond
Caron—Stan Boyko —Doug Yates
Grenfell—Orest Nawrocki —Duane Temple
Moosomin—Marg Lee
Rapid City—Carol McLaughlin
Ile des Chenes—Rod Craven —Rhonda Booth
Falcon Lake—Gord Elder
Kenora—Art McMillan
Ignace—Ed Hipfner
Upsala—Rose Mutton
Thunder Bay—Chuck Thompson
Nipigon—Eini Rathje
Geraldton—Aksel Johnson
Hearst—Anna Vanderlip
Mattice—Ronald Begin
Smooth Rock Falls—John de Vries
Ramore—Cleo Hebert
Haileybury—Keith Ryan
North Bay—Joseph Williams
Bracebridge—Keith Moore
Maple—Richard Sampson
Ancaster—Aubrey Marshall
Grafton—George Crumback
Kingston—Gary Peck
TQM—Monique Poulin
Polar Gas—Kalene Guyader

Front Cover - One of the mainline automatic welding crews at work on TransCanada's 1219 mm (48-inch) pipe looping program near Portage la Prairie, Manitoba. This is the largest diameter pipe ever installed on the company's system.

Published for the employees of TransCanada PipeLines and their families by the Public Affairs Department.

Publications Supervisor:
C. B. Tucker
Assistant Editor:
Martine Becu

MORE THAN $600 MILLION -

1981 Construction program biggest in company's history

The 1981 construction program is the biggest in TransCanada's history, with more than $500 million being spent on mainline construction and more than $100 million in compression facilities for a total in excess of $600 million.

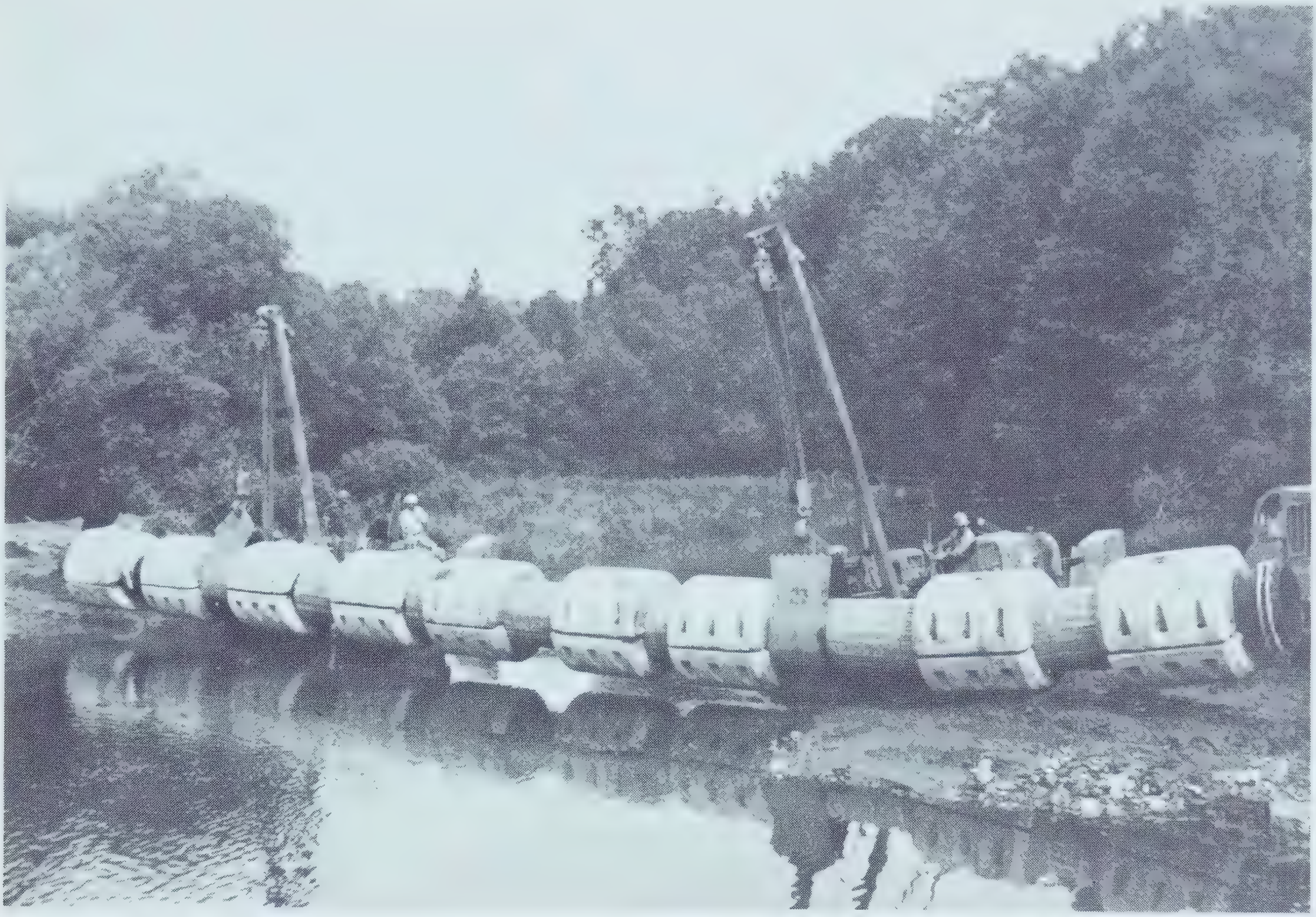
Expansion in Western Canada has involved the installation of the largest diameter pipe ever installed on TransCanada's system. This 291 km installation of 1219 mm (48-inch) pipe between Herbert, Saskatchewan and Winnipeg will cost more than $200 million.

This expansion marks the beginning of a fifth line for the TransCanada system between Burstall, Saskatchewan and Winnipeg. Heading up the western construction is Construction Supervisor Jack Kehler. The Toronto Pipeline Design Project Leader is Bob Basaraba.

Mr. Basaraba said that the looping in western Canada also saw an automatic welding process being used for the first time on a production basis. This process has seen in excess of 3.2 km of welding being achieved per day by two crews. With manual welding, about 2.4 km would have been the maximum rate of progress.

There has also been a program of valve and pipe replacement in the Western Area. Completed in

Out to visit construction of the first 1219 mm (48-inch) diameter pipe on the TransCanada system were, from left: Ole Johanson, President, O. J. Pipelines Ltd., George Hugh, Vice President, Engineering and Operations, TransCanada PipeLines, Benoit Baribeau, President and Chief Executive Officer, Trans Quebec & Maritimes and Rad Latimer, company President and Chief Executive Officer.



Bronte Creek is crossed during looping program on Niagara line, between Brampton and Burlington, Ontario.

September, this program was under the direction of Brian Booth of the Western Area and Project Leader Terry Sedor of Toronto.

In the Central Area, looping or third line construction of seven sections in Northern Ontario, (plus one section in Western Area) will see the installation of 207 km of 1067 mm (42-inch) pipe. This program started on October 7, 1981, and is scheduled for completion in March, 1982.

Pipe replacements required in the Central Area, at Kenora and Jellicoe, were completed on September 3. Costing more than $200 million, the Central Area looping and pipe replacement is headed by Ed Visseau of the Central Area and Project Leader Louis Kintzl of Toronto.

A looping program on the Niagara line will see the installation of 43.7 km of 914 mm (36-inch) pipe between Brampton and Burlington. This program is scheduled for completion in early December. Bill Binder is the Eastern Area Construction Supervisor for this program and the Project Leader is Jim Dickson of Toronto .

Five pipeline sections, 610 mm (24-inch) and 508 mm (20-inch), have been replaced on the Montreal line, between Toronto and Montreal. Looping on the Montreal line will see 12.7 km of 914 mm (36-inch) pipe being installed near Morrisburg. This looping and pipe replacement program was headed by Acting Construction Acting Supervisor Wayne Appleton and Project Leader Gary Stephen.

Looping on the St. Mathieu line (south of Montreal) is now underway and involves the installation of 32.6 km of 508 mm (20-inch) pipe. To be completed in late November, this program is headed by Acting Construction Supervisor Eric Eirikson and Project Leader Terry Sedor, both of Toronto.

Guy Cataford, Manager, Compression Facilities reports that the 1981 program includes eight compressor additions in Northern Ontario and the Montreal line. In addition, three portables are being relocated to the Montreal line and a unit from Northern Ontario is being relocated to the Niagara line.

George M. Hugh, Vice President, Engineering and Operations, Utility Divi-

Adjusting a line-up clamp during pipe replacement program on Montreal line, near Kingston, Ontario.

sion, praised the efforts of all the TransCanada engineering and operations staff.

Mr. Hugh said that although people are being pushed to the limit, they are able to meet the challenge. Effective planning and organization has resulted in efficient construction and high production rates.

Despite the inclement weather, and late approvals, Mr. Hugh said that all work is proceeding on schedule. The one exception, is the 12.7 km of looping on the Montreal line, (Kingston area) which has been delayed due to environmental reasons. High water levels in agricultural lands caused the delay, but work will recommence when frost firms-up the ground.

Mr. Hugh said that the company's Purchasing department should be complimented on the way they were able to acquire in excess of $300 million of material required for the construction programs. This was accomplished with few delivery delays.

Mr. Hugh also complimented the Right-of-Way and Environmental staff. He said that they completed a massive program of acquiring rights of way and were able to provide environmental and other reports required by regulatory bodies.

A new compressor station, Eaglehead, Stn. 69, is being constructed on the North Bay short-cut, in Northern Ontario.

On October 20, the NEB hearing commenced on the North Bay short-cut. This will involve the construction of 420.2 km of 914 mm (36-inch) line, between North Bay and Morrisburg, at a cost in excess of $450 million.

Additionally, on September 1, TransCanada filed an application with the National Energy Board for $317 million in new pipeline facilities for 1982.

"We require these facilities to provide capacity on our system to handle projected growth in our Canadian markets as well as exports already approved by the government," said TransCanada Vice Chairman and Chief Operating Officer George W. Woods.

In its application, TransCanada asks the Board to approve construction of 292 km of pipeline in Saskatchewan, Manitoba and Ontario. Included in this total are 186 km of 1219 mm pipe in Saskatchewan and Manitoba, 81 km of 1067 mm pipe in Ontario, and 25 km of 914 mm pipe south of Winnipeg.

"TransCanada has traditionally looked to Canadian sources of supply for its material and services. A construction program like the one we have proposed for 1982 will provide a tremendous boost to the pipeline industry and the Canadian economy in general," Mr. Woods said.

A welding crew moves along the vast open prairie between Moosomin and Grenfell, Saskatchewan on TransCanada's western looping program.

CALGARY : Canada's boom city

Calgary Today - A view from north hill, overlooking Bow River.

By Phil Lewis

Calgary — the Stampede City and the hub of Canada's oil and gas industry — is alive and kicking! The first bronc to come out of the shute in 1912 still resembles a bronc like White Lightning, who threw his mount unceremoniously into the infield dust at this year's Stampede. And the city itself, by comparison, is surprisingly similar.

The city at the turn of the century boomed due to the rapid settlement of the Canadian West. A settlement that created economic expansion not unlike the present.

There were 64,000 Calgarians in 1912, more than a seven percent increase from the previous year. In that year there were 3,000 building permits issued by the city, worth $12 million, a figure which was not equalled until 1947. There were more real estate offices than grocery stores.

In order to cope with this rapid development, Calgary's transportation system was expanded. By the end of 1912 there were 300 miles of streets, a "staggering" 22 miles of which were paved. For those without a vehicle, one could always travel upon the new streets by cab. The horse drawn version cost 50 cents for 15 minutes or $1.25 for an hour. For the courageous there was the gas powered model at $3.00 an hour.

Then - The city in 1912, from the north hill. The same rapid growth.

In addition to these modes there was the city's street car system, which was in full swing. The 41-mile system was powered by electricity which was fed to street cars by overhead wires. The power source for the operation was two 500-kilowatt steam generators. Commuters paid 25 cents for eight tickets. While the system was safe and efficient, it was often cold riding in the winter as the wood stove at the end of the car failed to fight off the frost.

In addition to these advances, Calgary also had a new energy source in 1912. A natural gas pipeline was built into the city from Bow Island, northwest of Lethbridge.

An itinerant cowboy named Guy Weadick, one of the 'Big Four' founders of the Calgary Stampede, knew a good thing when he saw it. He believed that this growing city, in the heart of the Canadian range, was a perfect spot for the staging of an international rodeo. The idea became a reality when Weadick garnered the support of a railway stock agent, H. C. McMullen, and the financial backing of various

This article was written by Phil Lewis, temporary Senior Public Affairs Co-ordinator, TransCanada PipeLines, Calgary. Phil is a recent graduate of the University of Calgary where he earned his masters degree in Economic History. The photos are courtesy of the Glenbow Museum and Calgary Transit.

Yesteryear - The original street car system went out of service in 1950.

cattlemen, including meat packer Pat Burns.

The first 'Stampede' featured a parade and a wide range of rodeo events which have endured to the present. These events included men's bronco and bull riding, steer wrestling and steer roping. The cowgirls also took an active part as they performed trick roping, relay races and bronco riding. The latter event has since disappeared.

Calgary today shows the same tremendous growth as it did in 1912. This boom, however, is fueled by Alberta's energy resources. The population is currently at the 600,000 mark and is increasing at a rate near that of the earlier period. It is estimated that 2,500 people move to Calgary from other parts of Canada each month.

The new light rail train on 7th Avenue.

Construction also continues at a similar pace. City Development Director Bruce McDonald believes that building permits "could hit the two billion mark this year." Commercial building permits alone have increased 115 percent from last year. One of these commercial projects, Calgary Centre, will become the new home of TransCanada PipeLines' Alberta Division.

The city's transportation network has struggled to match this growth. The situation may improve with the new light rail transit system. This system, like its predecessor, runs on rails and is powered by overhead lines. In this case, the power is provided by two coal burning generators. To date, the 12.5-kilometre southern leg has been completed. While the new system has had its problems, Transit Information Officer Dave Boyach believes "the system will eventually prove itself". Among the advantages are shortened travelling times for commuters, reduced pollution and less traffic on downtown streets.

The Stampede itself is as popular as ever and that unique western spirit still exists. More than a million people took in the rodeo and midway this year. Countless others enjoyed the parade and participated in associated events, such as daily square dancing in front of TransCanada's office.

At the conclusion of the 1912 Stampede, Guy Weadick, who championed the vision of a great city, asked those in attendance if they thought the event should be continued. The answer was a resounding "yes". The same answer is echoed 69 years later.

Present - A modern cowboy bronc riding.

Past - Bronc riding at first Stampede.

Company Pensioner Art Keay, left, was an official for the Track and Field events, while Central Area Safety Co-ordinator Chuck Thompson, center, was Transportation Committee Chairman and Jack Wright, Right-of-Way Co-ordinator, was Assistant Transportation Chairman.

Success of 1981 Canada Games credit to Thunder Bay organizers

The 1981 Jeux Canada Games held in Thunder Bay August 9-22 were the largest and best ever held. Corporations, such as TransCanada as well as company volunteers, helped guarantee their success.

These Summer Games are held every four years and the participants are not the National team athletes, but athletes who are aspiring to National and Olympic teams.

Each province and the two territories sent teams to compete in archery, rugby, sailing, soccer, softball, swimming, tennis, track and field, water polo, and water skiing.

Three thousand athletes and an equal number of officials, were assisted by five thousand volunteers. These people, mainly local citizens, volunteered their services as drivers, secretaries, statisticians, umpires, field officials, parking lot attendants and just plain labourers.

Marilyn Backen, wife of Mel Backen, Central Area Construction Supervisor, worked with the Protocol and V.I.P. Committee; Virgil Roman, Central Area Construction Inspector was a senior water polo official; Chuck Thompson, Central Area Safety Co-ordinator was Transportation Committee Chairman and R.O.W. Co-ordinator Jack Wright, was Assistant Transportation Chairman. Company pensioner Art Keay was an official in the Track and Field events.

The Transportation Committee was responsible for the transportation of all athletes, officials, V.I.P.'s and equipment prior to, during and after completion of the Games. This Committee had been functioning for two years, and when the Games opening was near it was quite common to hear, ''Gee we should have started sooner.'' Chuck Thompson said that his committee operated a bus system larger than the City Transit and a fleet of trucks and a taxi system larger than all the commercial operators in the city put together.

Approximately $11,000,000 was spent on capital projects, a legacy which was left to the city and athletes of the future. The major facility was the Canada Games Complex, the site for all swimming, diving and water polo events.

Marilyn Backer, left, worked for the Protocol Committee at the Canada Games.

This building houses squash and raquetball courts, an indoor track, a physical fitness center, and the largest indoor body of water in North America. Existing track, tennis couts, and playing fields were upgraded to standards capable of hosting National and International events.

Confederation College stripped its classrooms of all furniture to be turned into an ''Athletes Village,'' and housed and fed 1,500 athletes for each of the two weeks. Lakehead University was the home for the Athletic Officials. V.I.P.'s, Provincial Chefs de Mission, and the news media occupied most of the local hotel and motel accommodations.

Central Area Welding Inspector Virgil Roman, refereed the water polo event.

Not much room left for visitors and spectators? Well, citizens of Thunder Bay opened up their homes and rented rooms at reasonable rates. City lots and school grounds were converted into trailer and camping areas.

Funds for the Games came from the Federal government, the Ontario government, Wintario, and large corporations such as TransCanada PipeLines, and, of course, public donations. There were many public donations which allowed the Games to reach their goal.

Did we gain from the Jeux Canada Games?

Obviously the city of Thunder Bay gains from the facilities which are left behind. The city is now capable of hosting major sporting events in the center of Canada. Not all the athletes attained National or International status, but, the ''Esprit de Corps'' and the fellowship gained from meeting and competing with their brothers and sisters from coast to coast will remain with them forever.

Appointments

Baribeau appointed TQM President

Benoit Baribeau

The Board of Directors of Trans Quebec & Maritimes Pipeline Inc. has appointed Benoit Baribeau, President and Chief Executive Officer of the company.

Mr. Baribeau assumed his position on August, 1, 1981, at the company's headquarters in Montreal.

The Board has also appointed J. K. Archambault, Executive Vice President and E. A. Ballantyne, Executive Vice President - Maritimes.

Mr. Baribeau graduated from Ecole Polytechnique in Montreal in 1943 and became a member of the Order of Engineers of Quebec the same year. He has been involved in the supervision, administration and management of major projects for more than 35 years, including industrial projects in Quebec and Ontario, and defense construction projects in Canada, France and Germany.

As Hydro-Quebec's General Manager, Engineering, from 1962 to 1969, he was responsible for several major hydro-electric development projects. As General Manager for Transport Canada in Montreal, he directed the planning, design, and construction of Montreal's new international airport in Mirabel.

For the past five years, Mr. Baribeau has worked for the Groupe Lavalin as a senior advisor, airports and major projects.

Special Projects

L. D. Nichols

T. M. Jamieson

Dan Nichols and Tom Jamieson were appointed Manager and Assistant Manager, respectively, of Special Projects for TransCanada PipeLines.

In these capacities, they will report to Alex Bercovici, Manager, Planning and Development. Mr. Bercovici is also Executive Vice President and General Manager of TransCan Holdings.

Mr. Nichols joined TransCanada in 1967 as a member of the Facilities Planning group. Subsequently, he transferred to Planning and Development, Sales Department and in 1974, to Polar Gas.

Mr. Jamieson joined Polar Gas in 1976 as Supervisor, Financial and Economic Studies.

Mr. Nichols is presently Manager and Mr. Jamieson Assistant Manager of Financial and Economic Studies - Polar Gas. Both will continue to serve in these positions in addition to their functions for Special Projects. For their Polar Gas activities, they will continue to report to D. G. Clark, Vice President, Administration.

General Accounting Group

C. E. Rubie

A. M. Nichols

On September 10, the following appointments within the General Accounting group were announced by R. S. Smith, Controller, Utility Division.

Craig E. Rubie was appointed Assistant Manager, Coding and Payables. Mr. Rubie joined TransCanada in 1969. He obtained his R.I.A. in 1975 and has progressed through several positions within the Accounting and Treasury departments.

He will continue to report to D. W. Jagges, Senior Manager, General Accounting.

Anne Marie Nichols has been appointed Supervisor, General Accounting. Mrs. Nichols obtained her C.G.A. designation in 1980 and has held several accounting positions, the most recent as Controller of a management consultant firm.

Mrs. Nichols will report to I. M. Carter, Assistant Manager, General Accounting.

Legal department

L. H. Pilon

J. W. S. McOuat

Company President and Chief Executive Officer Rad Latimer announced the appointment of L. H. Pilon as Vice President, Law. This appointment was effective September 1.

Mr. Pilon joined the company in 1969 as Associate General Counsel and was appointed General Counsel in 1980.

At the same time, Mr. Latimer advised that J.W.S. McOuat was appointed General Counsel. Mr. McOuat joined TransCanada as Associate General Counsel in 1980.

Corporate Accounting & Control

F. G. West

F. G. West was appointed Manager, Corporate Accounting & Control, effective August 18.

Mr. West joined TransCanada in November 1971 as a member of the Plant Accounting staff and has progressed through several positions in the Accounting department since that time. He obtained his R.I.A. degree in 1975 and completed his B.A. at the University of Toronto in 1978.

Mr. West will continue to report to K. G. Whiteside, Vice President, Accounting and Control.

Gas Supply

L. A. Jaskula

L. A. Jaskula, Manager Information Systems, took on the added responsibilities of Manager, Geology on September 22.

Mr. Jaskula joined the company in September, 1974, as a Geologist and was appointed Chief Geologist in February, 1978. On February 1, 1980 he was appointed Manager, Information Systems.

In his new position as Manager, Geology and Information Systems, Mr. Jaskula will report to A. A. Wilkins, Vice President, Gas Supply.

In a further restructuring of the Gas Supply department, H. W. Walls reports to Mr. Wilkins.

NEW CORPORATE FUNCTION —

Information Systems

Recently, a careful review has been undertaken of potential computerized business information systems within TransCanada PipeLines. The review determined that major new systems are being considered for several divisions of the company. To ensure that the overall corporate objectives of TransCanada are best served, it will be necessary to assign priorities to the development of new systems and to closely monitor costs incurred with their implementation.

In order for this to be accomplished, systems and data processing activities in the Pipeline Division and the Alberta Division will be transferred to the Corporate Division.

The function will henceforth be known as Information Systems and R. D. Woldring will assume responsibility for it as Director, Corporate Information Systems, reporting to K. G. Whiteside, Vice President, Accounting and Control.

R. H. Waring, Manager, Systems and Data Processing, Toronto, and L. A. Jaskula, in his capacity as Manager, Information Systems, Calgary, will report to Mr. Woldring.

New appointments to Management Group

TransCanada's Vice Chairman and Chief Operating Officer George W. Woods recently announced the following appointments to the Management Group: L. D. Nichols, Manager, Special Projects, F. W. West, Manager, Corporate Accounting and Control, G. L. Smith, Manager, Budgets and Forecasts, J. R. Zinderdine, Supervisor, Editorial Services.

Come sail away . . .
on a summer's day

Correspondent: Kalene Guyader

Pat Bryant, with her in-laws, Lil and Stan Bryant. Pat and Rick own a Mirage 24 named "Triple Sec". The Bryants enjoy meeting new people and sharing stories.

There are summer days that are so hot and muggy that it's an effort just to breath. Days when you long for a breezy lake, sea air, and dream of sailing away. . .

Just another fantasy, right? Like winning the lottery? Not always. At Polar Gas, three employees found a way to turn their acquatic fantasies into reality and now regularly slip away from it all, on board the "Triple Sec", "Solitude", and "Dakri".

In the past seven years, Pat Bryant, Engineering; Phyllis Wallace, Pipeline Routing; and Dave Jensen, Accounting have each become confirmed addicts of sunshine, fresh air and sailboats. Now, whenever the weather permits, they spend every available spare moment aboard their boats.

Pat, Phyllis and Dave were interviewed in Toronto recently, by correspondent Kalene Guyader, and reveal how they got involved in sailing and what they enjoy most about it.

PAT BRYANT

"Meeting new people, and sharing stories and experiences is what I like best about sailing," said Pat. "Stories like a sailor having to change course to avoid being run over by a freighter, only to have to change course again to narrowly miss a lake ferry."

"Sailors are also a fun group of people who are willing to pitch in and help each other," adds Pat. "It's the feeling of camaraderie that I enjoy. With sailing as a common passion, strangers are never strangers for very long."

Pat and her husband Rick, TransCanada PipeLines, Accounting have been sailing for five years but the high point of their involvement came last fall, when they bought their own boat — a Mirage 24. "We christened her "Triple Sec" because we like the liqueur and because the boat is the same orangey-red color as the liqueur."

A Mirage 24 is a fin keel fibreglass sloop, so it's very stable. It's also a good size for two people.

"We always wanted this type of boat and were really happy when we found this one for sale last year," said Pat.

When they bought the boat Pat decided to advance her sailing skills by taking a Power Squadron course. The courses are run by volunteer sailors who have themselves successfully completed Power Squadron courses. "These courses stress boating safety. Different levels are offered, depending on your sailing ability. I took the course to learn how to do coastal navigation, and I learned to always trust my compass."

Pat had a chance to practice coastal navigation this summer when she and Rick sailed to the Thousand Islands, 272 km east of Toronto. "It took us about five days to get there and about five days to return." said Pat. "We met sailors from Kingston, Ottawa and New York. It was really fun."

PHYLLIS WALLACE

"Solitude" is the name of our boat and the name fits perfectly", said Phyllis. "When we're sailing, all I hear is the sound of the wind blowing in the

Terry and Phyllis Wallace on their boat "Solitude" on which they've spent many happy hours sailing peacefully.

sails and the lapping of the water. It's so peaceful."

Five years ago Phyllis and her husband, Terry, bought their first sailboat, a 21-foot DS-20. SAIL magazine calls this boat "the perfect pocket cruiser" because it has a short keel, but is very roomy inside. It can easily be transported on a trailer, and its short keel also allows it to slip into shallow bays inaccessible to larger boats.

Of course all sailors have a favourite tale. On their third trip out on "Solitude", Phyllis and Terry sailed through a storm, described by local townspeople, as "the worst storm on Sturgeon Lake in 35 years".

"We set sail knowing there was going to be a storm, but we thought it would be good experience to handle the boat in rough weather," recalls Phyllis. "It was certainly a lot rougher than we anticipated, but it was a good experience in learning about the boat. Like most sailors, during the storm I never considered what might happen to us, only how we were going to save the boat."

The boat was saved, and since then many happy hours have been spent sailing peacefully. "We're cruising rather than competitive sailors," said Phyllis. "However, when we come across another boat, sometimes we just can't resist a little friendly competition."

DAVE JENSEN

"Naming a sailboat is supposed to be a solemn occasion," points out Dave. "Every skipper wants his boat's name to have great meaning and significance. I spent a long time searching for the perfect name, but finally christened the boat "Dakri". It's not as significant a name as I had hoped for, but I'm happy that it's derived from the first two letters of my name and the first three letters of my wife, Kristie's name."

Dave got involved with sailing about seven years ago when he started toying around with an 11-foot dinghy. A dinghy is a small sailboat with a centerboard, as opposed to a keel.

"I've always loved boats and after sailing the dinghy I decided I wanted a real boat, with a keel," said Dave. "Three years ago I bought a 25-foot Northern, a keel boat with a sloop rig, which accommodates four people in reasonable comfort — if you know each other very well, that is! Sailboats are designed first for sailing and secondly for accommodation," points out Dave.

"I learned a lot about sailing by reading books and listening to other

Dave and Kristie Jensen sailed to the Thousand Islands in their boat "Dakri" this summer, along with their two daughters Inga, 11 and Sara, 10.

sailors, but mostly it was by experience that I learned how to sail," admits Dave. "Experimenting with all the ropes in different conditions, I soon learned how the boat handled.

A knowledge of other subjects, such as weather, is very useful for a sailor to know," said Dave. "A good sailor has to be able to read the weather to catch storm warnings, and plan his sailing strategy."

This summer Dave and Kristie, and their two daughters Inga, 11; Sara, 10; as well as their two kittens nicknamed "The Littermates" set sail for the Thousand Islands.

"While I like to involve my family in sailing, a family sailing vacation requires a lot of planning, Dave pointed out. "My daughters like sailing but sometimes they get bored on the boat. To keep everyone happy, we sailed only during the day and exploredthe towns where we stopped, during the late afternoons and evenings."

Whether they are sailing morning, afternoon or through the night, Phyllis and Dave agree that on a hot and muggy summer day, there is nothing nicer than sailing away...

cross country

Roland's sound systems provided the music at the Calgary office barbeque.

CALGARY

Correspondent: Phil Lewis

The Calgary Mainliner Club, to the dismay of the cattle in the province but to the delight of the 100 TransCanada employees and friends who attended, held their annual summer barbeque recently. This year's event was held at the Symon's Valley Ranch, which lies in the Foothills northeast of Calgary.

While the evening started slowly, no doubt due to the inclement weather, the pace soon picked up when ranch cook, Frank Turner announced, "it's food". Gigantic steaks, plates of steaming baked potatoes and brown beans, as well at acres of coleslaw, convinced everyone that Frank is a man of his word.

After the appetites of the throng were quelled, the music and dancing began. The music was provided by Roland's sound systems, who kept the joint hoppin'. Door prizes, including a watch and a dinner-for-two, were handed out during the evening, but the winners, who weren't pipeliners, quickly vanished into the night with their plunder.

One of the high points of the evening was the dance contest. Steve Thorburn, Operations, and his partner Grazina Hadala, Reserves, found the right location on the floor and won the spot dance. The twist contest was a shoe-in for Al Hudson, Operations and his wife Judy, whose masterful display left the other dancers in awe. Later, a limbo contest was held with Alice Shannon of Personnel emerging as the champion. Winners of the various contests won theatre passes. It now appears, however, that the real winners over the next few months will be the city's chiropractors.

The remainder of the evening was spent dancing and socializing. As the revellers dispersed into the cool of early morning, the consensus was that it had been an evening well spent.


The Calgary Mainliner executive who organized the barbeque and many other social events, include: from left; Steve Thorburn, Secretary; Susan Kugler, Vice President; Laurie Taylor, Treasurer; Pam Moldenhauer, Vice President and Debbie Heap, President.

BURSTALL

Correspondent: Terry Redfern

In early September, Station 2 began operating with an additional 21.8 Megawatts of compression capacity, bringing the total compression facilities at Burstall to approximately 100 MW (130,000 Horsepower).

Burstall, which is located approximately 100 km northeast of Medicine Hat, is the largest compressor station on the TransCanada system.

Burstall celebrates 60th anniversary

Correspondent: Terry Redfern

The town of Burstall, Sask., located on the Alberta-Saskatchewan border, is 60 years old this year. To celebrate, the community held a Homecoming for some 2,000 past and present citizens.

Correspondent Terry Redfern, District Clerk, reports that "The weekend was an outstanding and overwhelming success as temperatures soared into the high 30's (Celcius) and people continued to arrive. Some, as far away as California. The weekend was a busy one for all who attended."

One of the highlights of the Homecoming was a parade, which included an extraordinary 50 floats including a TCPL entry. For a community

Aerial view of Station 2 — 'A' Plant, on the left, houses four Clark and two Cooper reciprocating units, followed by 'B' plant which houses two Westinghouse (W62) turbines. 'C' and 'D' plants contain the Rolls-Royce/Copper 101G gas generators and 'E' plant is home to the RB211 Mark 22 turbine. In the background, 'F' plant houses the new RB211 Mark 24. The utility building and the cold storage warehouse are in the foreground, while the District office is located to the right of the flags.

of 550 residents the participation in the parade far exceeded all expectations.

"All the floats were prepared witn a true feeling of participation and professionalism and the results proved it," said Terry.

Yet another highly successful event was a weekend of airplane rides conducted by Bill Bates, District Manager and Charlie Standish, a local resident. Both Bill and Charlie donated and flew their own planes. Bill earned his "wings" in 1980 and is now the proud owner of the Cessna 172 used for the rides. During the weekend, Bill and Charlie carried approximately 90 passengers in two aircraft.

A TransCanada PipeLines truck and trailer play host to the Burstall Boy Scouts and Girl Guides float. The float was driven by Bill MacDougall, Technician.

Corrine Hilderman, waving, and Shelley Ressler, "driving" the near tractor, both Temporary Maintenance employees, rode TransCanada's float, while Fred Hilderman, Utility, drove the truck. Corrine dons a welder's cap to signify the importance of welding to our industry.

Swedish Girl Scouts make history

For the first time in years, Girl Scouts were invited to participate in the international Boy Scouts event known as Canadian Jamboree.

This year's annual event, held on July 1st in Kananaski, Alberta, attracted 24,000 scouts from around the world, including girl scouts from Sweden.

Al Temple, District Technician, who led a contingent of six scouts from Saskatchewan stated that the introduction of the Swedish Scouts at the Jamboree's opening ceremonies "brought a rousing welcome from the 24,000 other participants."

Al has worked with the Burstall Boy Scouts for the past several years and spends much of his leisure time organiz-

The Rocky Mountains provided a terrific backdrop for the many activities held during Canadian Jamboree. The Burstall Scouts are seen competing in the raft race.

ing various activities for the boys. Al is extremely dedicated and even took a week of his annual holidays this summer to participate in Canadian Jamboree '81.

Fortunately for Al, his wife Darlene is an extremely understanding person and is herself involved with scouting as a Leader for a Beaver colony.

Station 2, Burstall, is also the working home of Cub Masters from both Burstall and Leader, Saskatchewan. Bill MacDougall and Mike Besplug, both Technicians, are kept busy throughout the year organizing events for some 25 boys.

Darlene Temple, veteran Beaver Leader and wife of Al Temple, District Technician, is flanked by a colony of "Beavers".

District Manager Bill Bates, right, presents a set of fireplace tools to Terry and Dawna Redfern.

Employees at Station 2, Burstall, recently held a farewell party for Terry and Dawna Redfern, who have since moved to Brampton, Ontario.

Former District Clerk at Burstall, Terry is now the Assistant Administration Supervisor for Aviation at TransCanada's Aviation department in Malton.

Cabri Sub-District Manager Albert Ressler, tells a joke about one of Terry Redfern's more memorable business trips to Percy Redmond, right, Supervisor at Stn. 5. Looking on are Terry's mother, Illene and brother Ken, District Clerk at Stn. 25, Moosomin.

MOOSOMIN

Correspondent: Marg Lee

The first Western Area family golf tournament and barbecue was held recently at Kenosee Lake in Saskatchewan's Moose Mountain Provincial Park.

Some 40 men and women competed in the golf tournament, with a "two-ball foursome" being played later in the day.

The ladies' low gross was won by Jean Baily who received the Sub-District Manager's trophy. Gil Leslie won the men's low gross and received the Area Manager's trophy. Ladies' low net went to Nancy Reid with the men's

Winners of the low 'two-ball foursome' are Jean Baily and Dave McClenaghan.

low net being won by Dennis Duggan.

Winners of the "two-ball foursome" were Jean Baily and Dave McClenaghan.

The evening barbecue attracted nearly 100 people and featured the presentation of prizes.

Based on this year's success, the Western Area is hoping to make this an annual event.

Gil Leslie, winner of the Men's low gross, is presented with the Area Manager's Trophy by Dave Reid.

THUNDER BAY

This young fellow being helped aboard the helicopter told pilot Bob Latimer that he also planned to be a helicopter pilot.

Correspondent - Chuck Thompson

On Saturday July 18, the Thunder Bay Flying Club, The Kiwanis Club, Radio Station CKPR, and TransCanada PipeLines sponsored a Fly Day.

Planes were donated by various organizations and the citizens of Thunder Bay were invited to take a scenic flying tour of the city. Reasonable fees were charged, resulting in the raising of $7,000 for Crippled Children. Two company helicopters flown by Dave Flucker and Bob Latimer carried 438 pasengers during the day. While this event provided many highlights, the one that made the greatest impression was the sight of awe struck crippled children and their smiling faces when they too were helped aboard the helicopters for a free ride.

Helping Dave and Bob with crowd control, loading and unloading of passengers, were Aviation Engineers John Celmer and Bruce Birch, Area Safety Co-ordinator Chuck Thompson, together with volunteers Les Hannaford and Marilyn Flucker.

TransCanada's participation raised $4,380 and proved so successful that it was necessary to stop selling tickets before the afternoon ended.

It was a long hot day but as Chuck Thompson said, "It was well worth it, to help those less fortunate than ourselves."

Some of the crippled children who went for a ride in the company helicopters.

"There Is A Future In Scouting" was the theme used to decorate the TransCanada PipeLines tractor trailer used by the 15th Port Arthur Cub Pack. Under the guidance of Cub Leader Murray Collier, who works in Utility, at Station 68, the float was entered in the annual Shrine Circus Parade in Thunder Bay.

RAMORE

Correspondent: Cleo Hebert

Technician Ron Graham is assisted by summer student Brenda Lundstrom during a recent Operations' meeting.

The nine summer students who worked at Station 105, Ramore, were treated to a party at the close of the summer season.

Best of luck is extended to Nicole Rivard, Brenda Lundstrom, Sandra Lea Smith, Peter McGrath, Pierre Camirand, Jamie Graham, Bruce Cameron, Robert Craig and Richard Boothe.

The employees at Sub-District 105 wish a super year at school to all the students and look forward to seeing them next summer.

Employees at Station 105, Ramore were recently presented with safety awards for going two years without incurring a lost-time accident or a preventable vehicle accident. This is the first time that Ramore employees have been eligible to select jackets or down-filled vests.

NORTH BAY

Correspondent: Joe Williams

The sun stayed away, but the North Bay Mainliners didn't, at Station 116's annual picnic.

Although the weather curtailed a few of the scheduled activities, a good crowd turned out and enjoyed an excellent barbeque. Special mention goes to Adrien Plante, Technician, and Kurt Pusch, Utility, for their skills at the grill and to the wives of North Bay employees, for their delectable salad contributions.

Correspondent Joe Williams also reports that the summer employees at Station 116, "put away their paint brushes and lawn mowers" for the occasion "and had a real good time."

Senior Chef Kurt Pusch, Utility, of Station 116, North Bay.

BRACEBRIDGE

Correspondent: John Barker

EASTERN AREA GOLF TOURNAMENT

Once again this year, the Eastern Area "Golf Classic" was held in Bracebridge, Ontario on Saturday, August 29th. Despite the remarkably unpleasant weather, there was a splendid turnout. The competitors included 39 men and four women.

The almost constant rain did nothing to dampen the spirits of these 43 participants, most of whom completed all 18 holes, though not without stubborn opposition by the weather: Rain and mist blurred vision, while golf balls were driven up from the ground through the surface water like missiles from a submarine. At times, conditions deteriorated such that even the sea gulls present, sought shelter in the trees along the fairway.

Sam Foster must have considered issuing an order for everyone to don a Mae West, but how far can one take company safety? The book of rules of St. Andrews makes no reference to such equipment on a golf course! All in all, this day conclusively disproves Darwin's theory of evolution. Man evolved not from apes but fish!

By late afternoon, the last foursome reached the clubhouse and all proceeded to Kerr Park where a roaring log fire was ablaze in the grate while the barbecue pit was doing good business with hamburgers and hot dogs. Kerr Park is undoubtedly a fine location for these company tournaments and social activities.

Dick Walker's wife, Barbara, along with George and Rosemary Hugh, were present to congratulate the returning golfers and join in with the evening's social activities.

The Low Gross Trophy was awarded to Gary McMillan, Summer Student from Station 116, North Bay (this is the second year Gary has won this event). He shot a remarkable 81. The Ladies Low Gross Trophy, presented by George Hugh, was won by Vicky Jorstad, with an excellent score of 94. The Low Net R. D. Walker Trophy was personally presented by Dick Walker to Cleo Herbert of Station 105, Ramore.

HIGHLIGHTS AND HONORABLE MENTIONS

Gary McMillan was the winner of the Low Gross Trophy. His closest rivals were the three McLean Brothers (Scott, Rory and Doug), all in the close 80's. Don McLean must feel justly proud of his sons, having such astonishing golf talents. In fact, Scott was equal, if not one under Gary's score, but present rules governing the tournament dictate that trophies can be won only by company employees.

It was a pleasure to see such a strong representation from Toronto Office.

Pensioner Tom Colmer, in particular, was probably the most senior of all those present. In spite of weather and other natural obstacles, he completed the 18 holes in fine style. Congratulations, Tom! The foursomes of Al Dillabough from Sub-District 3123 and Al Jorstad from District 3116, were made up of invited friends who added to the enjoyment and interest of the day. Guests are, of course, most welcome to these events.

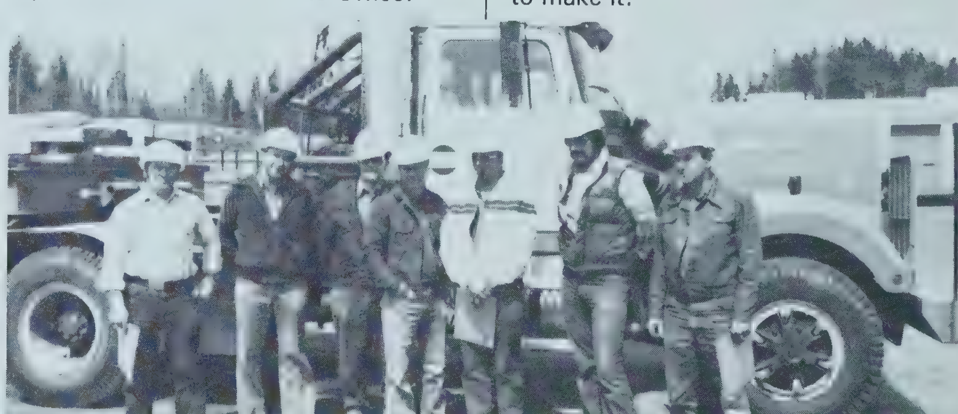
It was good to have Betty and Bruce Escoffery golfing with us. John Barker was fortunate to team up with them and maybe it was their good influence that helped him play an unusually good game for a once-a-year golfer.

Behind the scene superstars of the day were Denise and Gerry Parise, Hans Frommer and Don Douloff. Denise was in control of the lunch counter and bar, assisted by Gerry and Don, who for many hours supplied refreshments and food to more than fifty ravenous and thirsty people. Hans Frommer and Don managed the barbecue pit until the "typhoon" struck later in the evening, completely drowning out the charcoal fire.

However, the electric oven in the bar made up for this loss and Denise went into production with grilled hot dogs and corn-on-the-cob.

Thank you again, Denise, Don and Hans, with an extra honorable mention for Gerry who was really in charge of everything. He made the reservations at the Muskoka Golf Club - and for Kerr Park and all facilities. He also purchased and transported all the supplies for the bar and restaurant. What can we add, Gerry, except to ask you if you will do it all again next year?

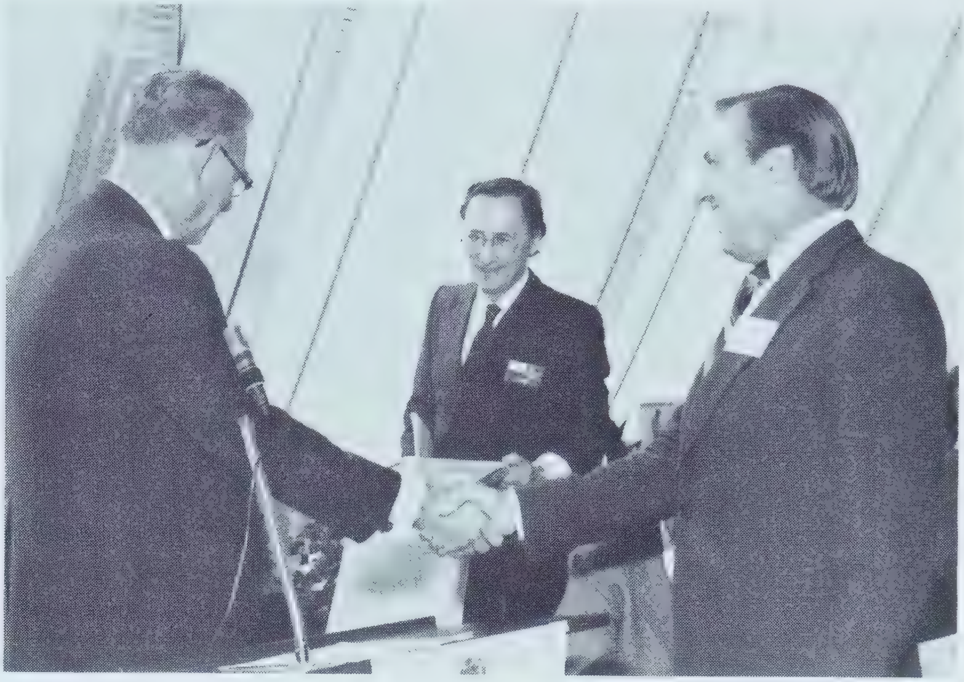
So the 1981 Eastern Area Golf Class ended in the usual good sense of a day well spent. The final word is to thank all who participated in the event and our condolences to those who were unable to make it.



Central Area employees recently participated in a Class "A" drivers upgrading course. The course was conducted by Confederation College, Thunder Bay. Graduates of the drivers course are, from left: Pierre Verrier, Stn. 49, Kenora; Carl Urschel, Stn. 58, Ignace; Noel Brochu, Stn. 92, Mattice; Andy Badiou, Stn. 68, Thunder Bay; Albin Eby, Stn. 55, Dryden; Mike Jarem, Stn. 80, Geraldton and Paddy Darling, Stn. 80, Geraldton.

TORONTO

Company pensioner Dorothy Todd, shows the award she received on Canada Day for Seniors to Frank Donnelly, Senior Manager, Purchasing. The awards were presented by Ontario Lieutenant-Governor John Aird at a ceremony held at Toronto's Harbourfront. Dorothy received this award for her years of work with the Canadian Diabetes Association and the lasting contribution she has made to the community and to Canada.



TransCanada's Manager, Aviation and Chief Pilot, Gerry Foster, right, receives a citation for service from the former President of the Ontario Society for Crippled Children, Alex McIntosh. In the center is Ian Bain, the Society's Executive Director. TransCanada donated the use of a jet aircraft for a day and Mr. Foster, along with his wife Doris, and other members of the Aviation department, donated their time in transporting physically handicapped children from Thunder Bay to summer camp near Swastika, Ontario.

Again this year, TransCanada entered a team in the North Toronto Industrial Softball League. Although the team was only slightly better than the Blue Jays, the win/loss record improved over the previous year. In addition to regular season play, the team entered a tournament in Pickering and put on a credible performance.

Toronto Mainliner baseball team included, front row from left: Beau Dollar, Mike Griffiths, Brian O'Neil, Cliff Taylor, Murray Young, and Rob Warren. Back row: Mike Montgomery, Bob Hale, Jim Scott, John Floras, Bruce Markle and Dan Fletcher.

TILLEY '81-'82

Great Christmas ideas for TCPL employees

Tilley of Canada Ltd. (Luxury Leather Goods) is offering a 50% DISCOUNT on all their leather goods (attache cases, wallets, purses, etc.) to all TransCanada employees along the line.

To obtain a catalogue, write or call Mainliner Club Social Director Bev Brush at:

(416) 869-2252
P.O. Box 54
Commerce Court West
Toronto, Ontario
M5L 1C2

"Diving's too much fun to spoil!"

Correspondent: George Little

It was a sparkling day in March when the four of us gathered at the government dock on Lake Simcoe, north of Toronto. Armed with axes, ice-saws and high spirits, we would have laughed at the idea that a tragedy could occur, had we not ignored the possibility altogether. Yet, before the day was out, we stood whitefaced and silent, and realized that disaster is never far away from the overconfident.

Al Jarvie, Ross Gallenger, myself and a new man, Clayton Dougal, all of the Underwater Club of Canada, were simply too eager to dive into the icy waters and explore its hidden treasurers.

As we set out onto the ice, we found, much to our delight, that the commercial ice-cutters had left behind a channel, now frozen to a thickness of four inches of ice, making it an easy matter for us to chop an entry hole.

Ross volunteered to serve as the tender, leaving Al, our diving instructor, Clayton and I to get into our gear quickly and prepare for the dive. Everything checked out, except for one thing — we had forgotton our safety line. Again, eager to get going, we compensated for our oversight by substituting a heavy fishing line. That was our first error.

As we prepared to submerge into the glittering water at our feet, Clayton who was diving for the first time, began complaining that his fin was tight and hurting. Looking back, I now realize that a diver with his mind on something else is a sure target for an accident. But, we were not to be deterred and dove in.

We were in a bay, 200 yards from shore and it was spectacular. About 100 feet along our journey, we discovered the hull of an old boat, lying in about 15 feet of water. It seemed safe enough, diving in only 15 feet of water, but then three of those feet were iron-hard ice.

The first I knew that something was wrong was when I saw Clayton hold out his mouthpiece to Al. Clayton had apparently taken in some water and was holding it out to Al, thinking he could clear it for him. Al, of course, tried to make him take it back into his mouth, but without success. Al tried a variety of techniques and finally flipped Clayton onto his back to lower his regulator and get a heavier air flow to the bit. That was when I saw, for the first time, the face of a drowning man. A sight I will never forget.

Clayton had by this time turned a peculiar color of blue and his eyes stared horribly. All I could think of was, "the hole. Get back to the hole".

It was then that I realized, that in my panic at seeing Clayton, my own mask had ripped off and my bit had jerked out of my mouth. I desperately held the bit above my head and let it blow, hoping to get a breath of air that was not 99 percent water.

By this time I was thoroughly panic stricken and had let go of our makeshift safety line. Gasping, choking and still fighting for that precious air, I suddenly felt myself bump against the ice, and managed to get a grip on myself. I drank what was left in my hoses, and as I became calmer, I put my mask on and started to try to find my way back to the hole.

Here, luck was with me again, I bobbed up into the underside of the ice-cutters channel, and although the ice over me was still too thick to burst through, I knew that I had to follow the trough to find the opening.

When I finally surfaced, I was exhausted and my brain was filled with horror and fear. I was sure Clayton was dead and I was incoherent as I told Ross of the tragedy. Then suddenly, Al broke through the surface beside me, towing the lifeless body of our partner. As we scooped the body out of the water, I realized that Al had laboriously dragged it through the icy water, with a grim determination that filled me with admiration.

Ross worked tirelessly trying to resusitate the utterly lax body. As I stood and watched with intense rhythm of Ross's swaying body and I saw Al's exhausted face. . . I cracked. . . and started to scream hysterically. I admit, without shame, that I had to be slapped back to sanity.

Clayton was dead, I knew it. I couldn't believe it, but I knew it just the same. Then about twenty minutes later, to my utter surprise, I heard him groan and I realized that Clayton was still with us. I almost broke down all over again, but this time with gratitude.

I was a pretty green diver back then, when the four of us went out on that haunting journey. Back then, I was one of those hell-for-leather, try-anything once fellows. Looking back, I realize what over-confidence, inexperience, eagerness and divided attention can do to a diver. Today, I'm a better diver and I owe a lot of that to the expert and steady guidance of my teacher and my buddy, Al Jarvie. If it weren't for Al, I would still be haunted with the sense that I had been present at a death.

I'm very concerned about safety these days and perhaps some will think me to be overcautious, but I've had one near-death experience and I don't want any more.

Diving is too much fun to spoil!

George Little, the author of the above article, works in Maintenance at Station 112, Marten River. George joined TransCanada at North Bay in March, 1975.

people

Hello To

Adair, G. F., Plant Accounting, Toronto
Alleyne, A. C., Data Processing, Calgary
Donnelly, E. L. (Miss), Pipeline Facilities, Toronto
Easden, M. J., Plant Accounting, Toronto
Farbar, G. G., Facilities Planning, Toronto
Firman, Gordon, Facilities Planning, Toronto
Hemingson, P. D. (Mrs), Personnel, Calgary
Ho, Alfred, Engineering Supervision & Studies, Polar Gas, Toronto
Hunking, N. J., Business Development, Toronto
Knothe, S. R. (Miss), Gas Supply Statistics, Calgary
Kretschmer, A. J., Treasury, Toronto
Kuziw, A. M. (Miss), Accounting, Calgary
MacKay, D. P., General Accounting, Toronto
Palmer, M. G., Reserves, Calgary
Peacock, K. A. (Miss), Printing, Toronto
Plumanis, Gunars, Drafting, Toronto
Saliba, D. M. (Miss), Accounting, Calgary
Schramm, R. C., Deliverability, Calgary
Snolkin, R. I., Systems & Data Processing, Toronto
Stacey, J. F., Energy Studies, Toronto
Suggitt, Kathryn, (Miss), Accounting & Control, Toronto
Unal, O. T., Reserves, Calgary
Weyland, John, Business Development, Toronto

Changes - July

Boros, E. (Mrs), Cerk to Senior Clerk, Eng/Ops Administration & Planning, Toronto
Brown, D. A., Accountant I to Accountant II, Corporate Accounting & Control, Toronto
Bryant, R. A., Accountant I to Accountant II, Payroll, Toronto
Dapp, N. (Miss), Executive Secretary, Administration to Word Processing Co-ordinator, Information Systems Development, Calgary
Cooney, D. J. (Mrs), Senior Systems Analyst, Systems & Data Processing, Toronto to Data Processing, Calgary
Galway, G. R., Junior Accountant to Accountant I, Plant Accounting, Toronto
George, L. E., Utility, Eng/Ops, Maple to Bracebridge
Gibson, T. P., Temporary Maintenance to Maintenance, Eng/Ops, Falcon Lake
Hague, J. A. (Miss), Mag Card II Operator to Word Processing Operator, Systems & Data Processing, Toronto
Hoover, D. J., Junior Accountant, Plant Accounting to Accountant I, General Accounting, Toronto
Hopkins, R. E., Accountant I to Accountant II, Plant Accounting, Toronto
Kinkela, D., Draftsperson 'B' to Draftsperson 'A', Eng/Ops Pipeline, Toronto
Labbe, G. M., Maintenance to Utility, Eng/Ops, Ancaster
Law, E., Junior Programmer to Programmer, Data Processing, Calgary
McLaughlin, G. E., Maintenance to Utility, Eng/Ops, Rapid City
Petrin, F. (Miss), Clerk to Senior Clerk, Accounting & Financial Studies, Calgary
Pierre, Leigh, Senior Draftsperson, Eng/Ops Pipeline to Senior Statistician, Energy Studies, Toronto
Sheldon, D. (Miss), Forecast Analyst to Reservoir Analyst I, Deliverability, Calgary
Taylor, L. (Miss), Senior Clerk to Junior Accountant, Accounting & Financial Studies, Calgary
Uguccioni, A. (Mrs), Secretary I, Eng/Ops Administration & Planning to Eng/Ops Pipeline, Toronto

Changes - August

Amadouny, V. (Miss), Administration Assistant to Senior Administration Assistant, Eng/Ops Administration & Planning, Toronto
Aubrey, G. B., Systems Analyst to Data Base Administrator, Data Processing, Calgary
Cathcart, R. G., Accountant I to Accountant II, Plant Accounting & Administration, Toronto
Chevrefils, G. R., Utility to Technician 'M', Eng/Ops, Maple
Drabble, R., Drafting Checker to Squad Leader, Eng/Ops Compression, Toronto
Emslie, W. S., Accountant II to Senior Accountant, Corporate Accounting & Control, Toronto
Flood, D. W., Senior Engineer to Assistant Supervising Engineer, Polar Gas Project, Toronto
Floras, J. P., Junior Statistician to Statistician, Energy Studies, Toronto
Gormley, P. V., Programmer to Programmer Analyst, Systems & Data Processing, Toronto
Gourley, D. E., Utility to Technician 'M', Eng/Ops, Ramore
Hale, R. D., Supervisor, Market Analysis to Assistant Manager, Market Analysis, Energy Studies, Toronto
Heron, L., Maintenance to Utility, Eng/Ops, Cabri
Hesson, R., Operator, Gas Supply Control to Gas Supply Co-ordinator II, Operations, Calgary
Hickey, A., Supervisor, Corporate Accounting & Control to Assistant Manager, Corporate Accounting & Control, Toronto
Hurst, T. R., Gas Controller to Senior Gas Controller, Eng/Ops Compression, Toronto
Jackman, B. G. (Miss), Secretary I, Personnel to Eng/Ops, Compression, Toronto
Jubenville, E. J. (Mrs), Graduate Engineer to Engineer I, Eng/Ops, Pipeline, Toronto
Kohl, P., Maintenance to Utility, Eng/Ops, Candiac
Kormos, M. E., Senior Engineer to Assistant Supervising Engineer, Energy Studies, Toronto
Lachance, D., Temporary Right-of-Way Agent to Right-of-Way Agent, Right-of-Way and Environmental Affairs, Eastern Area
Lane, J. C., Systems Analyst to Senior Technical Services Analyst, Systems & Data Processing, Toronto
Larstone, D., Technician 'E', Smooth Rock Falls to Sub-District Supervisor, Eng/Ops, Hearst
Lee, J. M., Accounting Analyst to Senior Accounting Analyst, General Accounting, Toronto
Leung, T. W., Junior Administration Assistant to Administration Assistant, Eng/Ops Administration & Planning, Toronto
McClennon, R. E., Utility to Technician 'M', Eng/Ops, Kingston

Melnik, B. J., Assistant Computer Operator to Computer Operator, Systems & Data Processing, Toronto

Ofremchuk, T. C., Supervisor, Financial Administration to Assistant Manager, General Accounting, TCPL Resources Ltd., Calgary

Pearson, L. J. (Miss), Solicitor I, Corporate Secretarial to Project Co-ordinator, Planning and Development, Toronto

Rubesa, Z., Senior Draftsperson to Drafting Checker, Eng/Ops Compression, Toronto

Russell, D., Manager, Engineering Business Development to Manager, Project Development, Business Development, Calgary

Terroux, M., Programmer Analyst to Supervisor, Programming, Data Processing, Calgary

Verlaan, C., Senior Clerk to Office Services Assistant, Office Services, Toronto

Vollmer, C. (Mrs), Switchboard/-Receptionist, Accounting & Financial Studies to Senior Word Processing Operator, Information Systems Development, Calgary

West, F., Assistant Manager, Corporate Accounting & Control to Manager, Corporate Accounting & Control, Toronto

Wilson, H. R. (Miss), Switchboard Supervisor to Supervisor, Telephone Services, Office Services, Toronto

Wise, G. D., Maintenance to Utility, Eng/Ops, Kenora

Terminations - July

Cameron, J. M. (Miss), Eng/Ops Pipeline, Toronto

Elliott, D., Reserves, Calgary

Lingard, K. (Miss), Systems & Data Processing, Toronto

McCaw, N., Operations, Calgary

Soteros, A., Data Processing, Calgary

Szarkowicz, T. P., Eng/Ops, Thunder Bay

Van Vliet, P., Eng/Ops Administration, Toronto

Yanota, E., Data Processing, Calgary

Marriages

Breton (Nee Brouard), L. J., Eng/Ops, Mattice, August 7

Braun (Nee Petrin), Fernanda, Accounting, Calgary, July 2

De Luca, F. J., Drafting Pipeline Design, Toronto, July 17

Park (Nee McMillan), M. L., Deliverability, Calgary, July 18

Patzer, L. W., Compression Field Transmission, Herbert, April 25

Webb, W. H., Plant Accounting, Toronto, August 15

Births

Hill, B. F., Business Development, Toronto, Boy, Christopher, April 15

Inman, L. M., Public Affairs, Toronto, Boy, Andrew, March 1

McCaig, K. J., Compression Field Transmission, Kenora, Boy, Matthew Kim, June 30

Siepmann, Siggi, Compression Field Transmission, North Bay, Boy, Siegfried Tyson Oskar Alexander, July 6

Volk, T. F., Eng/Ops, Burstall, Girl, Denise Marie, August 10

Retirement

Kypson, D. (Mrs), Reserves, Calgary

OBITUARIES

SIMPSON

Annette Simpson, wife of retired employee, Douglas G. Simpson, died in Toronto on August 19.

Mrs. Simpson is survived by her husband, former Controller of TransCanada who retired in July, 1972.

SMITH

Elmer C. Smith, 50, a Technician at Station 209, Ancaster, died suddenly on August 23.

Mr. Smith joined TransCanada in September, 1958, at Station 116, North Bay. He is survived by his wife, Edna; two sons, Gregory and Timothy; and a daughter, Catherine.

DYCK

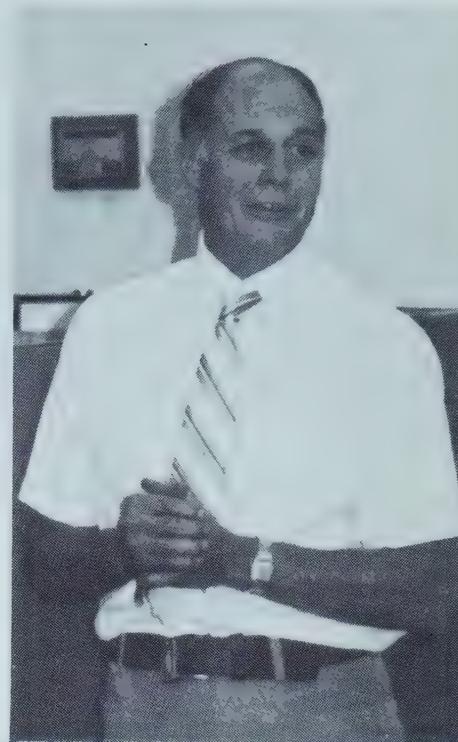
Gertrude Dyck, wife of Abe K. Dyck, Utility, Station 13, Caron, died on September 3.

Mrs. Dyck is survived by her husband and two sons, Kenneth and Calvin, both working in Temporary Maintenance at Station 13.

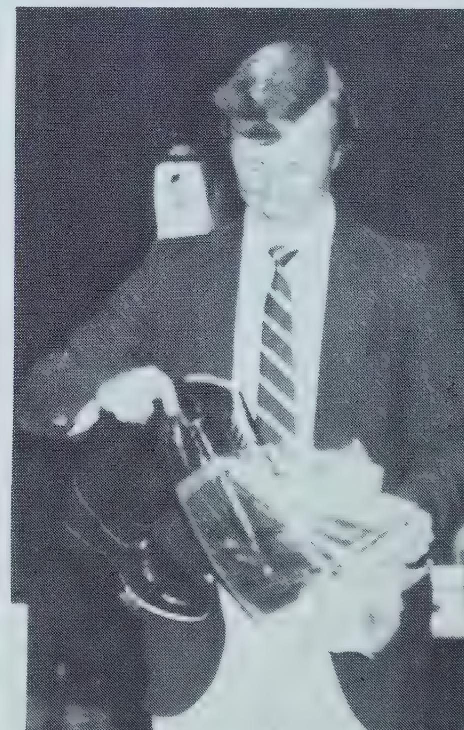
MADDEN

Douglas E. Madden, formerly with Office Services, died on August 3, at the age of 62, following a lengthy illness.

Mr. Madden joined the company in 1974 and due to ill health went on long term disability in 1977. He is survived by his wife Violet, and three children, Carol Hall, Terry and Wayne Madden, of Purchasing.



Happy Retirement - Taking early retirement is Graham Whidden, Manager, Sales Forecasting. Graham joined TransCanada in June, 1956 as a Sales Statistician and celebrated 25 years of service on June 11. He and his wife, Doreen, have three children. Mr. Whidden said that he had no particular plans for his retirement and that he would particularly miss working with his many friends at TransCanada.



Gone West - Before Dave Russell got settled out West, his friends in Toronto feted him at a farewell reception held at the downtown Holiday Inn on August 27. Dave was appointed Manager, Project Development on August 1, and is located in TransCanada's offices in Calgary. He was presented with a pair of cowboy boots and everyone's best wishes.

Looking "trim and slim" is Les Liley of Eng/Ops who shows he knows golf etiquette.

This professional swing belongs to Executive Vice President Jim Cameron. His drive was also good.

At the Thunderbird's practice green were, from left, Barb Chapman, Dianne Thorburn of Corporate Secretarial, Sigi Schneider of Legal and Gwen Buckeridge.

1981 GOLF TOURNAMENT BACK AT THUNDERBIRD

Perfect weather greeted the 120 golfers who participated in the Toronto Mainliner Club's annual golf tournament held August 22 at the Thunderbird Golf and Country Club.

The big winner was Bill Fletcher of Treasury, who won the J. M. Blackwell trophy for the men's low gross. Ladies' low gross Ruth Wilson trophy was won by Sigi Schneider of Legal.

Winner of the men's low net was Bob Galway of Accounting who was awarded the D. G. Clark trophy. The Mainliner Club trophy for ladies' low net went to Janet Biggs of Systems and Data Processing.

A buffet dinner and dance followed the day of golfing and congratulations go to Recreational Director Gord Griffin of Purchasing for another well organized tourney.

Keeping his eyes on the ball, is Terry Dalgleish of Legal, this year's United Way Vice Chairman at Toronto office.

Waiting their turn on the first tee were: from left; Barbara Britton, Betty Escoffery, Cathy Starr of Rates and Elaine Ross.

Teeing off the eleventh is company pensioner Jim Blackwell who is this year's loaned executive for United Way.

SERVICE AWARDS

25 years

Peter Jaworski
Eng/Ops
Ignace
August 8

Cecil Flippin
Purchasing
Toronto
August 16

Steve Bakay
Eng/Ops
Rapid City
September 16

15 years

Shan Yu
Eng/Ops
Toronto
August 10

Paul Archer
Eng/Ops
Toronto
August 16

Gary Mortimer
Polar Gas
Toronto
August 29

Clinton Morehouse
Eng/Ops
Maple
September 7

Robert Zamkotowich
Eng/Ops
St. Boniface
September 11

Judy Baribeau
Public Affairs
Toronto
September 12

5 years

Mike McFadden
Eng/Ops
Rapid City
March 26

Paul Wigle
Eng/Ops
Toronto
June 21

Del Jeffery
Insurance & Property Tax
Toronto
July 19

Monica Pecus
Sales
Toronto
August 16

Jim Ward
Eng/Ops
Toronto
August 23

Leigh Pierre
Energy Studies
Toronto
September 30

Janet Turchet
Personnel
Toronto
September 20

1981 third quarter net income up 36 per cent compared to 1980

TransCanada PipeLines reported on October 22, an increase of 36 per cent in net income per common share for the third quarter of 1981 compared to the same period in 1980.

In a nine-month report to shareholders, TransCanada's President and Chief Executive Officer Rad Latimer said earnings per share for the three months ended September 30, 1981, were 72 cents compared to 53 cents for the third quarter last year.

For the first nine months of 1981, net income applicable to common shares increased by 24 per cent to $82,981,000 from $67,096,000 for the same period in 1980. Earnings per common share increased by 20 per cent to $1.89 per share compared to $1.58 last year. Funds from operations for the period increased by 19 per cent to $5.12 from $4.32 per share in 1980.

Mr. Latimer noted that the National Energy Board approved an adjustment in TransCanada's rates, effective September 1, which includes an increase in the company's rate of return on rate base to 12.63 per cent from 11.1 per cent and allows for the recovery of higher operating costs. "The final quarter of 1981 will reflect the full impact of the new rates," he said.

Net operating income for the quarter was up $19.4 million over the similar period last year, with the Pipeline division contributing $18.3 million and oil and gas operations contributing $1.1 million to this increase. For the nine-month period, net operating income was up $38.5 million over the same period in 1980. The Pipeline division contributed $29.9 million and oil and gas operations $8.6 million to this increase.

Mr. Latimer noted that TransCanada's oil and gas subsidiary, TCPL Resources, recently purchased Cancarb Ltd., a producer of thermal carbon black used in the manufacture of industrial rubber products. Located in Medicine Hat, Alberta, Cancarb produces 40 million pounds of thermal black per year in one of the most modern facilities in the world.

Yoke Yong
Polar Gas
Toronto
June 14

Dave Martin
Rates
Toronto
August 9

Joy Harris
Systems &
Data Processing
Toronto
August 24

Roel Lancee
Eng/Ops
Toronto
September 24

Great Lakes

5 Years

Elva Barnes
Iron River, WS
September

Josephine Schanandore
Ashland, WS
September

John Holtslander
Rapid River, Michigan
August

10 Years

Buy your Canada Savings Bonds on the Payroll Savings Plan.

PHOTO CONTEST

Although the back cover of this magazine shows the Photo Contest deadline as September 25, this date was extended to Monday, November 2.

Results will be published in the December issue of Along The Line.

Employees of TransCanada PipeLines, Polar Gas, Great Lakes Gas Transmission and Trans Quebec & Maritimes, are invited to enter the Annual Photo Contest. The deadline for entries is September 25.

A cash prize of $75 will be awarded for the best entry in each of the five categories. Runner-up prizes of $25 will be awarded in each category. An additional $25 will be awarded for the 'best-in-the-show.'

This year's contest features five categories and there's no limit on the number of photographs you may enter.

Categories

1. Children
2. Scenery, Plants and Still Life
3. People - at work, in action - showing character, personality
4. Where I work - At the office, compressor station; on construction
5. Animals - Your favorite pet or animals in their natural environment

Color and Black and White

Either black and white or color photographs may be entered in all categories.

Contest Rules

A. There is no limit on the number of photographs you may enter.

B. Each photo entered must be taken by the employee who submits it, during the past year.

C. Transparencies should be either 35 mm or 2 1/4 x 2 1/4 and must be mounted. Black and white prints should be 5 x 7 or larger.

D. A category will NOT be judged unless it contains entries from at least three employees.

E. No contestant may win in more than one of the five categories.

F. Print your name and address plus the category on the back of each print or on the frame of each slide. (On glass-mounted slides, use a small label.)

G. Address your entries to:

Along The Line Photo Contest
TransCanada PipeLines
P.O. Box 54, Commerce Court West
Toronto, Ontario M5L 1C2

Package your entries securely and mark 'Photo—Do Not Bend' plainly on the outside of the envelope. Contest deadline is September 25.

NATURAL GAS TODAY

No. 2, 1979

NATURAL GAS TODAY

Published four times yearly on behalf of the Canadian Natural Gas Industry by TransCanada PipeLines.

No. 2, 1979

COVER

Canada's Birthday will be celebrated from coast to coast from June 25 to July 1. The hub of the festivities will centre around the "eternal flame" overlooking the Parliament Buildings in Ottawa, the nation's capital.

TransCanada PipeLines,
P.O. Box 54,
Commerce Court West,
Toronto, Canada
M5L 1C2

Publications Supervisor. . . . **Conrad B. Tucker**
Editor . . . . **Allan F. Bailey, APR**

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TransCanada PipeLines

'WELCOME' ADDRESS

Prospects are bright for world gas industry in the 21st century

By JAMES W. KERR
President, International Gas Union
and
Chairman and Chief Executive Officer,
TransCanada PipeLines

On a world-wide basis the gas industry has continued to make substantial progress during the past three years. This progress has been directly the result of the leadership, the diligent efforts, the innovation, the job knowledge and the expertise of men and women of the gas industry.

Projections for world natural gas production capability from conventional sources indicate substantial growth through the year 2000. This production capability is expected to increase from 1½ tera or 1.5 x 10^{12} cubic metres in 1978, to 4 tera or 4 x 10^{12} or 140 trillion cubic metres in the year 2000.

The proven world reserves of natural gas have just about doubled in the last 10 years and now total an estimated 64 tera, or 64 x 10^{12} cubic metres (2,250 trillion cubic feet). These reserves give us a global reserve life index of approximately 42 years.

To put these global reserves in perspective it is estimated that the world consumption of natural gas, up to the present time, is 40% of the total remaining reserves that are now proven and currently recoverable.

However, we need to understand that natural gas reserves are ultimately finite, and the need for major new and supplemental sources will be apparent as we approach the end of this century. In other words, as we enter the 21st century, decreases will begin to show if proven global reserves of natural gas unless we have a dramatic new breakthrough in discovery methods.

Technological advances in the offshore underwater area have been dramatic over the past 10 years, to the point where world-wide offshore production of gas reserves accounted for 17% of total world production in 1978.

There has also been remarkable growth in liquefied natural gas as a world trading commodity. In 1978 world LNG trade involved about 45 giga or 45 x 10^9 cubic metres (1.6 Tcf). Projections indicate that by 1990 world LNG trade will be 200 giga or 200 x 10^9 cubic metres (7 Tcf). If these projections are realized, natural gas transported by carrier will become an extremely important commodity in world trade.

Natural gas is a premium, non-renewable energy source and we must actively support and continue our commitment to conservation by effective and efficient utilization.

Some examples of major initiatives that could significantly either increase the supply or reduce the demand for natural gas include:

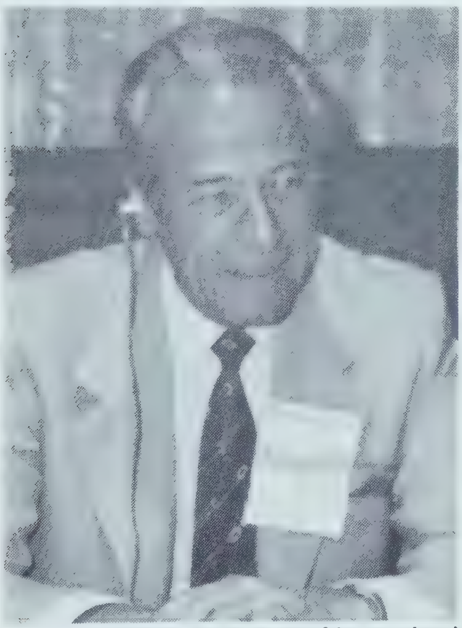
- Reduction of flaring and venting of natural gas. It is estimated that flaring and venting accounted for about 15% of world market production in 1978.
- Co-generation of electricity and heat by the use of gas turbines, with the reject heat being substantially absorbed for space heating or industrial processes.
- Capture and use of reject heat from pipeline compressor stations for commercial and industrial space heating, industrial processes and prehaps for agricultural applications.
- Substitution of natural gas heat pumps for conventional air conditioning and heating systems.

James W. Kerr, President, International Gas Union, welcomed delegates to the 14th World Gas Conference . . .

CANADA HOSTS WORLD GAS CONFERENCE

More than 2,300 delegates and their wives from 36 countries converged upon Toronto recently for the 14th World Gas Conference and Gas Industry Exhibition.

The delegates, from all corners of the globe, were welcomed by James W. Kerr, Chairman and Chief Executive Officer, TransCanada PipeLines, and President, International Gas Union, the first Canadian to be so honored. It also marked the first time the World Gas Conference has been held in Canada.



Eric Giorgis . . . new President of International Gas Union, 1979 - 1982.

It was truly a world-wide event. Russia had 50 registered delegates and 20 industrial observers. Australia and New Zealand were represented by 15, and Indonesia and the Peoples' Republic of China had three each. More than 500 delegates attended from the Western European countries and over 80 were from the eastern block.

The Scandinavian countries sent 40 delegates, Japan, 60, and other countries such as Brazil, Israel, Mexico, Taiwan and South Africa were represented as well. The largest number of delegates were from Canada and the United States.

The Conference was officially opened May 28 at the O'Keefe Centre by Ontario Premier William G. Davis, and the Gas Industry Exhibition at the Toronto Harbour Castle Hilton Convention Centre later in the day by Mitchell Sharpe, Commissioner of the Northern Pipeline Agency.

Over 100 companies and associations from the 36-member countries of the IGU displayed and demonstrated the latest developments in research, processes, materials, equipment and related services used by the natural gas industry.

The Royal York Hotel was Conference headquarters where the bulk of the business was conducted.

Backbone of the business sessions was the presentation and discussion of 66 technical papers by 134 authors representing 22 nations. All sessions were simultaneously translated from English or French into English, French, German and Russian.

As well, three theme papers and two national papers were presented.

Various technical tours and social events were well attended. General interest tours included Niagara Falls, the Art Gallery of Ontario, the McMichael Canadian Collection, the Royal Ontario Museum and Black Creek Pioneer Village.

Another highlight of the Conference was the International Colloquium About Gas Marketing—the 43rd meeting of the Colloquium.

Also of great interest was the continuous presentation of technical films.

The President-elect of the International Gas Union for the next three years is Eric Giorgis, Administrateur Delegue Compagnie Industrielle et Commerciale du Gaz, S.A., of Vevey, Switzerland, and his country will host the 15th World Gas Conference in 1982.

Framework for the future

By J.A. ARMSTRONG
Chairman and Chief Executive Officer
Imperial Oil Limited

When it comes to energy, Canada is one of the "have" countries rather than one of the "have-nots". Discoveries in recent years have put Canada in the position of having enough natural gas to meet our domestic needs for the foreseeable future.

However, like most western countries, we do have our imbalances, and one of the most pressing concerns crude oil. Potentially this country has lots of oil. For instance, the oil sands of western Canada alone contain the equivalent of nearly a trillion barrels of crude, about 10% of which is recoverable with present technology.

Canada has become a world leader in this type of technology—two oil sands plants are in operation and two more are on the drawing boards—but it will still be a long time before the sands can become a major production source. Other areas which hold major promise for hydrocarbons are the western Arctic, the Arctic Islands and the offshore Atlantic.

PRODUCTION DECLINE

In the meantime we face a familiar dilemma. At present, Canadians consume more oil than they produce, and the gap is widening as production from our more easily accessible reserves continues to decline.

Our current net deficiency is around 300 barrels a day and most of the eastern part of our country is dependent on imported crude.

The OPEC events of 1973 and the sudden quadrupling in price of OPEC oil hit us as it hit the other oil importing nations. The effect was less traumatic than on those countries that were totally dependent on imports, but we all learned the same basic lesson—that oil was no longer a commodity that could be taken for granted. More recently, events in Iran have reinforced that lesson.

When the members of OPEC first increased the price of their crude oil, Canada, like every importing country, found that it had no shortage of doomsayers. Fortunately, the pessimists' worst fears were not realized. The world did not collapse under the weight of petrodollars.

It is clear that the prophets of doom seriously underestimated the ability of the OPEC countries to absorb their new riches and the rate at which they were to spend them on their own social and economic development.

CHANGED ENVIRONMENT

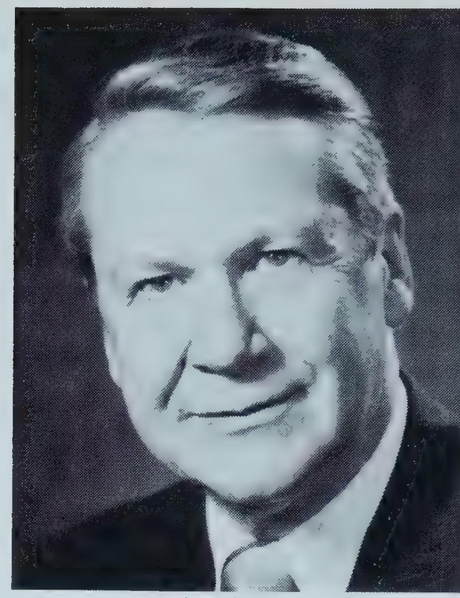
Then, in Canada, as elsewhere, we had our technological optimists. Such people saw no reason why the same kind of technology that had put a man on the moon could not solve our energy problems. These optimists foresaw a world whose traditional dependence on oil would be rapidly superseded by synthetics and by various forms of plentiful and cheap renewable resources.

But it didn't happen that way in Canada or anywhere else. The optimist, has seriously underestimated the difficulties of developing new technology, the long lead times and the environmental and political constraints that inevitably attend new energy projects.

However, the concern displayed in Canada and in other western countries at OPEC actions was not altogether unfounded. We did not freeze in the dark, but we rapidly came to appreciate the effects that a changed world energy environment could have on our living standards, economic growth, inflation and material expectations.

ACHIEVEMENTS

Nevertheless, we managed to survive. We learned to adjust. We learned how to use energy more efficiently in our homes and in our industries. We learned how to conserve energy—by driving smaller cars, by driving more slowly, by insulating our houses and our factories.



J. A. (Jack) Armstrong

And, in Canada, as elsewhere, we even managed to glimpse a silver lining in the shape of new opportunities. Just as oil at $12 a barrel improved the economics of developing the resources of Alaska's North Slope and the production of North Sea oil, it encouraged this country to speed up exploration of its high-cost Arctic regions. And oil at $16 and more a barrel provides the economic incentive for Canada to accelerate its efforts to unlock the resources of its oil sands and to turn its exploration efforts to the deep-water Atlantic.

Today the Canadian petroleum industry can look back with justifiable pride on its recent achievements. Our mature oil and gas fields in western Canada have yielded more new discoveries than many people would have thought possible. Production from existing wells has been significantly increased through improved methods of recovery. Oil is flowing from the oil sands and planning of other heavy-oil projects is proceeding at an encouraging pace. Considerable amounts of gas and some oil have been found in the Arctic and we are now exploring our deep water frontier regions.

PAINFUL LESSONS

These achievements, however, have been hard-won and progress in many areas has not been as fast as some of us would have liked. For example, construction of a pipeline to transport that natural gas that has been discovered in the Canadian Arctic to markets in the south appears to me to be still many years away.

Everyone concerned with the development of new supplies of oil and

gas in Canada—including the industry, investors, various governments and their agencies and the Canadian public—has learned some very hard lessons. The learning process has sometimes been painful for all concerned, but I think that it has set the scene for a new and more realistic era of energy development in Canada.

Perhaps the most important lesson to emerge from Canada's experience is that energy development cannot be divorced from government policy or from politics. The role of government in all natural resource development is an increasing and probably irreversible trend throughout the world. It has unquestionably added an important new dimension to our business.

GOVERNMENT PARTICIPATION

Apart from direct government participation via such instruments as our national oil company, Petro-Canada, the industry has come to recognize that the government, in one form or another, is its indirect partner in virtually all phases of the industry in planning and developing virtually every project.

And government's vast regulatory powers in such areas as fiscal policy and environmental control allow it to play a make-or-break role in such projects. It can use these powers to control the pace and the direction of energy development in this country. And, by so doing, it has introduced a new and sometimes uncertain element into industry planning.

An important lesson that the industry has had to learn over the past few years is that energy development in today's context inevitably means trade-offs between purely economic considerations and national policy goals, between technological and environmental considerations, and between social aspirations and energy priorities. And what makes it more difficult is that all of these factors are inter-related.

There is a lesson here, too, for governments and I am not quite sure whether it is one we have yet properly learned in Canada. While other factors other than strictly economic ones have a legitimate role to play in energy policymaking, we still ignore the competitive system at our peril. No matter how politically attractive a certain course of action may seem, energy policy cannot be formulated without a proper regard for economics and the needs of the marketplace. Otherwise, projects become either unfeasible or unrealistically expensive. Energy projects must show due regard for captial productivity if countries are to avoid major misallocations of their financial resources.

ENERGY POLICY

We should be alert to the danger of governments using energy policy to further non-energy objectives. Canada is one of the few countries that has chosen to hold domestic oil prices well below world levels to cushion the effect of the increase on its citizens. But when the price of oil is kept artificially below its real level, conservation—an important ingredient of any energy policy—is discouraged and the true cost of energy to the country become clouded. In the end someone has to pay, and that someone is inevitably the taxpayer in one form or another.

Gas . . . the road ahead

By SIR DENIS ROOKE
Chairman, British Gas Corporation

The future of gas cannot be considered in isolation from other fuels.

Three years ago at the time of the last World Gas Conference, many experts were saying that the world could expect a severe crisis of physical supply by the early to mid 1980's. Crude oil supplies in particular would no longer be able to meet demand, and the output of other fuels, mainly coal and nuclear power, would have to be increased drastically.

We in the British Gas were among the few to argue strongly against the prevailing view. We believed that the effects of energy conservation had been underestimated—that for economic reasons demand was unlikely to grow as quickly as many others were saying, and that supplies of indigenous oil and natural gas could be maintained for longer than many were assuming.

In the last three years, many in the United Kingdom have come around to our view, and are far less adamant about the possibility of an early "energy gap" due to physical constraints, although we all recognize that "supply tightness" is a political weapon that may be employed frequently.

CHANGE OF VIEW

We have also seen that several studies outside the U.K. now put the possibility of serious difficulties over crude oil supplies further back into the 1990's, or even later.

This change of view is based on the general realization that forecasts of energy demand made three or four years ago were unrealistically high. Economic growth is now generally expected to be at a lower rate and growth in the demand for energy is likely to be further dampened by consumers making strenuous efforts to save energy in the face of increasing real prices. And in turn, higher real prices of energy also serve to stimulate the development of new sources of supply.


Sir Denis Rooke

Over-ambitious programs devised for raising coal output and increasing nuclear power at almost any cost have been cut back, and greater emphasis is now being put on the sensible use of fuel.

PREMIUM APPLICATIONS

More people outside the gas industry have realized in the last few years that gas should be used as much as possible for premium applications that maximize its environmental advantage and ease of control.

For most countries, particularly in the Middle East, gas has become too valuable just to flare. Many people have also concluded that natural gas is too valuable to burn in large quantities in commercial electric power stations which necessarily reject about two-thirds of the energy input.

Gas is likely to become more and more exclusively a premium fuel reserved for domestic and specialized commercial and industrial applications. In these fields much research has already been carried out into ways of improving efficiency, but further opportunities remain.

In may countries houses have already been built incorporating construction techniques and building materials designed to reduce the overall energy requirements of the householder for space and water heating.

Other developments in the domestic market will centre on the supply of energy from heat pumps and alternative sources such as solar energy.

THE CHALLENGE

Gas is destined to play a vital role in the world for decades to come. We all know how long it can take to develop a brand new technology, so the impact of the renewable sources will be slow to appear, even if solutions can be found to the formidable economic, and sometimes environmental problems which they pose.

Nuclear energy, too, has its problems, both of acceptability as well as technology, so the immediate burden will continue to be borne to a huge extent by fossil fuels and, for refined uses, by the king among them—gas.

And, as gas is so valuable, while we expect to find new sources of production, it is hope that we all encourage energy conservation—not a "hair shirt" approach, but one of "too good to waste".

Another lesson we have learned, and one that can stand emphasizing, is that energy policy is rarely, if ever, a choice between mutually exclusive alternatives. It is not a question of soft paths versus hard paths, of non-renewables versus renewables, or of conservation versus development.

The best way of improving any nation's supply of energy requires policies that encourage conservation and that stimulate production of all its indigenous resources.

In an energy hungry world we can't afford the luxury of ignoring any economic energy source. We shouldn't have an oil policy, or a gas policy, or a coal policy, or a nuclear policy each operating in isolation. We need policies that recognize end-use substitution and inter-fuel competition, as well as such factors as the fiscal needs of risk-taking investors and the state of technology for each energy source. This is beginning to happen in Canada.

Another important lesson we have come to learn in Canada is that energy development is truly an international problem and that our energy opportunities can best be realized through international co-operation. If every country is to derive maximum benefit from whatever resources it may possess, we must share our technological expertise.

But we have to do more than share technical data, vital though this is. We also need to share information and experiences on such matters as what are the best means of achieving conservation, or methods of achieving energy efficiency, and on the economics of energy development. We must bring our collective knowlege to bear on this international problem.

A NORTH AMERICAN PERSPECTIVE

Energy policy and the role of gas

By HENRY D. JACOBY
Director, Center for Energy Policy Research
Sloan School of Management
Massachusetts Institute of Technology

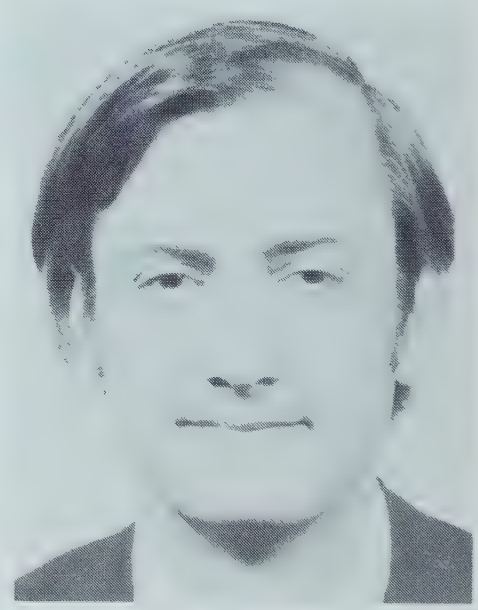
Natural gas is one of the great blessings of North America. Nowhere in the world is this resource used as extensively and to such great economic advantage as it is here.

However, ours is a complex system of three independent nations—each with its own peculiar economic and social situation, and a set of national objectives.

Right now we are on the threshold of an important change in the gas industry and it is important that we understand it, anticipate its effects, and put ourselves in a position to adapt to it flexibly.

The issue is the impending deregulation in natural gas in the United States. By 1985 we will likely see a gas market fundamentally different from that of the past decade, and some of our most tightly held opinions about gas—what it is, and what it is worth—may have to change.

The tortured history of U.S. policy has had a strong influence in shaping the industry as we know it today. The story



Henry D. Jacoby

is one of market forces overwhelming our regulatory institutions.

FEDERAL REGULATION

In the mid 1950's, right in the middle of a period of rapid expansion, the field price of natural gas was put under federal regulation. The Federal Power Commission (now the Federal Energy Regulatory Commission) was to protect

continued on page 11.

James M. Cameron heads Canadian Gas Association for 1979-1980 term

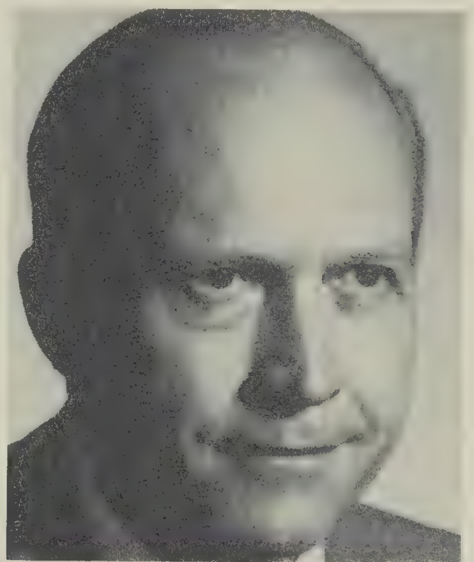
James M. Cameron, Executive Vice-President, TransCanada PipeLines, Toronto, was elected Chairman of the Canadian Gas Association at the 72nd CGA annual meeting in Toronto.

He succeeds **Egerton W. King**, President and Chief Executive Officer, Northwestern Utilities Limited, Edmonton, and Canadian Western Natural Gas Co. Ltd., Calgary.

Other CGA officials elected were **R.E. Kadlec**, President, Inland Natural Gas Co. Ltd., Vancouver, First Vice-President; **J.J. Leroux**, Chairman of the Board, Northern and Central Gas Corporation Limited, Toronto, Second Vice-Chairman. Mr. King remains on the Board as a Director and Immediate Past Chairman, and **W.H. Dalton** remains as President and Chief Administrative Officer and a Director of the Association.

Directors for the 1979-1980 term will be: **John Anderson**, Executive Vice-President and Chief Operating Officer, Westcoast Transmission Company Ltd., Vancouver; **Jacques Beauchamp**, President, Gaz Metropolitain, inc., Montreal; **J.M. Beddome**, Senior Vice-President, Oil and Gas Operations Division, Dome Petroleum Limited, Calgary; **J.H. Brace**, President, Honeywell Limited, Scarborough, Ontario; **A.T. Crosscombe**, Vice-President, Marketing, Municipal and Utility Division, Rockwell International of Canada Ltd., Guelph, Ontario; **N.J. Didur**, President - Utilities, Inter-City Gas Limited, Winnipeg; **R.K. Kidd**, Vice-President, Gas Operations and Energy Conservation, British Columbia Hydro and Power Authority, Burnaby, B.C.; **J.M. Macleod**, Senior Vice-President, Shell Canada Resources Limited, Calgary; **R.W. Martin**, Senior Vice-President, Operations, The Consumers' Gas Company, Toronto; **D.R. Motyka**, Vice-President, Production Operations, Gulf Canada Resources Inc., Calgary; **D.G. Olafson**, Vice-President and General Manager, Gas Transmission Division, The Alberta Gas Trunk Line Company Limited, Calgary; **J.H. Pletcher**, Senior Vice-President, Canadian Western Natural Gas Company Limited, Calgary; **A.P. Rathke**, President, Greater Winnipeg Gas Company, Winnipeg; **T.E. Squires**, Advertising and Marketing Manager, B.D. Wait, Co. Ltd., Oakville, Ontario; **W.G. Stewart**, President and Chief Executive Officer, Union Gas Limited, Chatham, Ontario; **R.W. Thompson**, President, Cooper Energy Services Ltd., Rexdale, Ontario; **F.G. Ursel**, General Manager, Saskatchewan Power Corporation, Regina; **J.E. Wright**, President, Temprite Industries Limited, Mississauga, Ontario.

James M. Cameron



Egerton W. King

R. E. Kadlec

J. J. Leroux

AT CGA ANNUAL MEETING

'Marketing efforts must be given greater emphasis'

By JAMES M. CAMERON
Chairman, Canadian Gas Association, 1979-1980
and Executive Vice-President, TransCanada PipeLines

The past year has seen many interesting developments affecting the Canadian natural gas industry. One of the more important developments was the inquiry by the National Energy Board into the country's gas supply and requirements, and the Board's subsequent finding that Canada has a surplus supply in the traditional producing areas of approximately 2 trillion cubic feet, and a remaining supply of more than 66 Tcf. Another was the greater recognition of the oil and natural gas potential of Mexico.

While gas supply has been growing rapidly as a result of higher prices and Alberta Government incentives to producers, market growth has continued to decline. There are several reasons for this reduced rate in sales growth, but the major ones are relatively higher gas prices, fierce competition in eastern Canadian markets from low priced imported coal, a current oversupply of residual fuel oil and conservation efforts by all segments of the market.

Our healthy gas supply situation presents a definite asset to our industry in terms of promoting additional sales because of the assurance it provides prospective customers of a continuation of supply. Nevertheless, the industry has returned to an era where marketing efforts must be given a greater emphasis. It is no longer a seller's market.

It is evident that Canada has sufficient natural gas reserves to displace large volumes of imported fuel from eastern Canadian markets. Such action would contribute greatly toward the federal and provincial governments' stated objective of energy self-reliance for Canada.

It is also evident that we have sufficient gas reserves to make additional exports. Both of these actions could make large contributions toward Canada's balance of payments.

There are several major project proposals which will continue to be newsmakers in the coming year. Among these are the Polar Gas Project, the Alaska Highway Project, the proposal by TransCanada PipeLines to make gaseous energy available east of Montreal as far as the Atlantic Provinces, the Q & M Pipeline proposal, and the LNG Arctic pilot project proposed by Petro-Canada and Alberta Gas Trunk Line.

Although we are currently enjoying a surplus of natural gas in the conventional producing areas, the need still remains for continued exploration in the frontier area, although the urgency for attaching frontier reserves to the Canadian market has somewhat diminished.

There is also a need for continued research and development in the natural gas industry such as the scientific work being carried out at the Canadian Gas Research Institute in the areas of high efficiency appliances and new technologies to recover energy wastes.

I am looking forward to my year as Chairman of the Canadian Gas Association. We are on the threshold of an exciting and challenging new era in our history. I expect many important decisions will be forthcoming during the coming year and have complete confidence in our membership, our committees and in our CGA staff to meet these challenges effectively and efficiently.

For the first time, Toronto was the host city for the International Gas Union's World Gas Conference which was held in the Royal York Hotel May 27 to June 1. To mark the occasion, James W. Kerr, President of the IGU and Edmund C. Bovey, Chairman of the Organizing Committee for the 14th World Gas Conference presented two original paintings to Paul V. Godfrey, Chairman of the Municipality of Metropolitan Toronto on behalf of the IGU. The paintings, rendered in acrylics by the well-known Toronto artist Harry Rankin, depict the Toronto skyline as seen from Toronto Island, and the city's world-famous City Hall at Christmas time. The paintings were commissioned by Mr. Kerr and used as his personal Christmas cards to International Gas Union members during his term as President of the world-wide organization. Mr. Kerr, centre, Chairman and Chief Executive Officer of TransCanada PipeLines of Toronto, and Mr. Bovey, right, Chairman of the Board, Norcen Energy Resources Limited, Toronto, are shown presenting the paintings to Metro Chairman Godfrey.

Fisher re-elected Chairman, CGRI

A.J.L. Fisher, Vice-President and General Manager, Canadian Western Natural Gas Company Limited, Calgary, was re-elected Chairman of the Canadian Gas Research Institute at its fifth annual meeting in Toronto.

Other officials elected were **R.B. Stokes,** Executive Vice-President, Inland Natural Gas Co. Ltd., Vancouver, as Vice-Chairman, and **W.H. Dalton,** President of the Canadian Gas Association, as President and a Director.

Directors for the 1979-1980 term will be: Joseph Baladi, Vice-President, Corporation Planning and Development, Gaz Metropolitain, inc., Montreal; Frank Capewell, Executive Vice-President, Union Gas Limited, Chatham, Ontario; T.E. Gieruszczak, Vice-President, Special Projects, The Consumers' Gas Company, Toronto; R.K. Kidd, Vice-President, Gas Operations and Energy Conservation, British Columbia Hydro and Power Authority, Burnaby, B.C.; G.A. Leslie, Vice-President, Customer Relations and Planning, TransCanada PipeLines, Toronto; D.S. McIntosh, President (Ontario Division), Northern and Central Gas Corporation Limited, Willowdale, Ontario; A.P. Rathke, President, Greater Winnipeg Gas Company, Winnipeg; B.A. Steuart, Acting Manager, Gas System, Saskatchewan Power Corporation, Regina; Herb Wank, Vice-President, Engineering, Canadian Gas Association, Don Mills, Ontario.

Alberta Natural appointments

John E. Goudie has been appointed Senior Vice-President of Alberta Natural Gas Company Ltd. and Alberta and Southern Gas Co. Ltd. Officers and managers responsible for legal, accounting, treasury, audit and industrial relations functions will report to him.

Mr. Goudie was Vice-President, Finance and Administration, prior to his appointment.

Alberta Natural Gas Company Ltd. also announced the appointment of **Gordon T. Noland,** Vice-President, Planning and Development, in addition to his duties as Assistant to the President of Alberta and Southern Gas Co. Ltd.

Mr. Noland will be responsible for activities associated with the future expansion and diversification of the company.

Dr. Allen named Chairman of CPA

Dr. Fraser H. Allen

Dr. Fraser H. Allen, President of Amoco Canada Petroleum Ltd., has been elected Chairman of the Canadian Petroleum Association Board of Governors at the Association's 26th annual meeting in Calgary.

Governors elected for a two-year term were: **B.F. Isautier,** Aquitaine Company of Canada Ltd.; **R.W. Buhrman,** Canada-Cities Service Ltd.; **W.L. Leuschner,** Candel Oil Ltd.; **C.O. Nickle,** Conventures Ltd.,; **A.M. McIntosh,** Home Oil Company Limited; **Robert Strother,** Husky Oil Ltd.; **W.J. Whelan,** Kaiser Oil Ltd.; **G.A. Mustard,** Marathon Petroleum Canada Ltd.; **D.G. Little,** Mobil Oil Canada Ltd.; **B.H. Monzingo,** Murphy Oil Company Ltd.; **G.W. Cameron,** Pan-Alberta Gas Ltd.; **P.C. Evans,** Placer CEGO Petroleum Limited; **A.N. Boyce,** Quasar Petroleum Ltd.; **R.C. Galloway,** Quintana Exploration Co.; **R.A. Wall,** Total Petroleum (North America) Ltd.

Governors with one more year to serve are: Dr. Allen; **D.D. Barkwell,** Norcen Energy Resources Limited; **J.E. Baugh,** Petrofina Canada Ltd.; **Dr. E.W. Best,** BP Canada Limited; **Harry Booth,** Alberta Natural Gas Company Ltd.; **A.B. Bristow,** Chevron Standard Limited; **R.W. Campbell,** PanCanadian Petroleum Limited; **R.H. Carlyle,** Gulf Canada Resources Inc.; **O.C. Windrem,** Texaco Canada Inc.; **C.W. Dumett, Jr.,** Union Oil Company of Canada Limited; **A.R. Haynes,** Esso Resources Canada Ltd.; **W.R. Loar,** Sun Oil Company Limited; **J.M. Macleod** (Vice-Chairman, CPA), Shell Canada Resources Limited; **A.R. Nielsen,** Canadian Superior Oil Ltd.; **S.G. Olson,** Hudson's Bay Oil and Gas Company Limited.

Ex-officio members are: **Dr. C.R. Evans,** Chairman, British Columbia Division, Esso Resources Canada Ltd.; **R.G. Farquharson,** Chairman, Saskatchewan Division, Murphy Oil Company Ltd.; **K.W. Lloyd,** Chairman, Pipeline Division, Hudson's Bay Oil and Gas Company Limited.

Stoik new CEO of Gulf Canada

The Board of Directors of Gulf Canada Limited has announced the election of President **John L. Stoik** as Chief Executive Officer, and the election of Executive Vice-President **J.C. Phillips** as Chairman.

Mr. Phillips' appointment becomes effective August 1, 1979, when **Clarence D. Shepard** retires as Chairman. Mr. Shepard will continue as a Director.

Shell Canada appointment

W.A.M. Birt has been appointed Vice-President of Employee Relations and Public Affairs at Shell Canada Limited.

He joined Shell Canada in 1951 in the Personnel and Industrial Relations department and since 1974 has been General Manager, Employee Relations.

Mr. Birt is a member of the Governing Council of the University of Toronto.

Gas appliances feature of model home

"A Touch of Class" was the theme for the model home featured at the 1979 National Home Show in Toronto.

The model home, containing a central living room around which the various living areas were grouped, provided new ideas, new insights into modern construction and design for convenience, luxury and personality.

The overall theme for the National Home Show this year was "All the New Ideas are Here" and the model home wrapped up most of those ideas into a neat, comprehensive package with concepts applicable to vacation properties, condominiums, apartments or houses.

Natural gas appliances played important roles in this year's model home kitchen, laundry and recreational area, and were loaned to the show by The Consumers' Gas Company. They included a built-in gas oven and broiler, a gas clothes dryer and indoor and outdoor gas barbecues.

A gas pool heater and gas furnace were supplied by the manufacturers.

Consumers' Gas supplied gas appliances for the model home . . .

continued from page 6.

consumer interests by insuring that gas prices were set no higher than could be justified by the historical costs of gas exploration and development.

From the beginning the FPC had price-setting power only over gas transported between states. The price of gas produced and burned within a state remained a market price.

For several years this regulation had little effect on the industry, but a process had been set in motion that inevitably was going to lead to shortages in the interstate market.

By the late 1960's demand began to outstrip supply outside the producer states. Finally in the early 1970's came curtailments. Many industries which had been using interstate gas were forced off, and available supplies were directed to household and other priority uses.

POLICY CHANGES

Now, as a result of recent energy legislation in the U.S., the situation is beginning to change. First, the Natural Gas Act put the U.S. on the road toward deregulation of interstate gas prices. The Gas Act contains a provision to load increased prices onto industry, thereby further protecting the residential user.

The second change in U.S. policy is the Fuel Use Act which regulates fuel choice at the point of consumption.

The law attempts to correct for the fact that industrial fuel choice has been biased by the artificially low prices of natural gas and oil. It orders all gas out from under electric utility boilers, which now amounts to about 18% of U.S. natural gas consumption.

SUBSTANTIAL SUPPLY

Canada and Mexico each are blessed with substantial resources of natural gas, and each has a growing industry.

Canada is roughly one-tenth the size of the U.S. in population and Gross National Product, and Canadian gas consumption is about 10% of that in the U.S. Canada exports about 5% of U.S. consumption, netting over $2 billion in revenues each year.

Mexico has not begun substantial exports to the U.S., although a deal involving shipments of almost 4% of U.S. consumption was aborted last year. It appears that the potential exists for Mexican exports on the scale of the current Canadian trade, and perhaps more.

THE CHALLENGE

From the U.S. perspective, there will be a market-clearing price for new gas, and resistance to pay any more than this amount for imports.

From the viewpoint of our neighbors there maybe a market price in the U.S., but it is the product of government policies as well as market forces, and therefore subject to challenge as a basis for international sales.

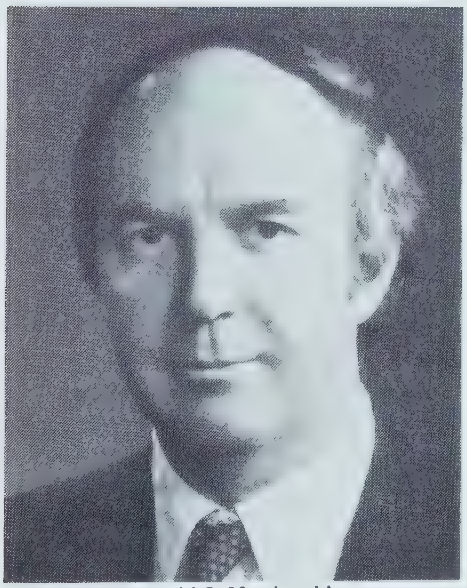
The important thing is that resources not be wasted—that we not pass up opportunities that are to everyone's advantage because of our inability to agree on the definition of value.

This will require patient bargaining, backed up by sound analysis. But most of all, it will require flexibility, for the market conditions need not pay respect to any particular technical definitions of value.

Hardened positions on this issue could be a real stumbling block to trade that is to everyone's advantage.

Former Canadian Energy Minister

Macdonald advocates vast information program for global energy industry



Donald S. Macdonald

The world energy industry is in vast need of extensive consumer information programs to dampen public cries of "conspiracy" when supply shortages occur, says Donald S. Macdonald, a former Canadian energy minister.

Speaking at a special luncheon during the 14th World Gas Conference, Mr. Macdonald, now a partner in the Toronto law firm of McCarthy and McCarthy, suggested that the public awareness programs should set out the dimensions of the problems we could face.

They should also include, he said, "an indication in the ways in which governments and industry are moving to meet basic needs, and above all, that the supply shortages which do occur, despite our best efforts, are not some sort of conspiracy, either by the private sector, or by the public sector, or by some even less tangible forces".

"We should not underestimate this task," he warned, and added: "The results of a poll announced earlier this year in the United States indicated that the majority of Americans still do not believe the energy crisis is real."

Mr. Macdonald said Canada's energy formula is looking to an objective of self-reliance. He said a very high proportion of Canada's energy needs would be met from Canadian resources—with extra capacity in place to cover exposed sectors of the Canadian market in an emergency.

He stated that one of the key elements of Canada's energy self-reliance program is to use its abundant gas supplies to

substitute for less plentiful oil wherever this is reasonably economic.

"Despite this," he said, "we expect that there will continue to be some surplus natural gas available for exports which will help defray the cost of remaining oil imports."

Turning to the international scene, Mr. Macdonald reflected that the Canadian experience shows that with the right kind of policies..."natural gas can make a very important contribution to meeting the energy problems of the major consuming nations.'

He speculated that priority should be given to widening the market which is capable of being served by natural gas.

"The reality of higher prices must also be accepted. You only get what you pay for in this life, and one cannot expect energy security to be achieved at historic prices.

"Huge investments are needed, but let's not forget that they will have a very positive impact on the economics of the countries involved."

"Finally," said Mr. Macdonald, "an important element of the price increases is that there must be a sharing of the benefits between public needs and private returns."

He said that the sharing would have to be done in such a way as to stimulate both private and public investment in new exploration development transmission— as well as distribution facilities to bring more of this vital energy source to market.

SENATOR ERNEST C. MANNING WARNS:

'Threat of an energy crisis is serious'

While the outlook in this country with respect to natural gas is most encouraging, the overall energy situation is far from bright, Senator Ernest C. Manning told delegates at a special luncheon during the World Gas Conference.

Sen. Manning said that faced with the present known facts and the most reliable projections into the future, at least three conclusions are inescapable.

"The threat of an energy crisis in many industrialized nations, including the United States and Canada, is both real and serious," he said. "Whether the present energy problems reach crisis proportions in five, 10 or 20 years is largely academic. Ten years either way is relatively insignificant in the life of a nation."

The Senator stated that the pertinent point is that at best we have a relatively short time to take the steps necessary to insure our future energy requirements.

"Ironically, one factor impeding the implementation of effective preventive measures is still widely-held public belief that no real energy crisis exists," he said. "Repeatedly, people are heard to say that the developing shortages and predictions of worse to come are nothing more than scare tactics on the part of multinational companies to force up prices and enhance their own profits.

"Unless this delusion is soon dispelled, those who hold it are in for a rude and painful awakening," he warned.

POSITIVE STEPS

Sen. Manning said if we are to avert, or at least minimize the developing energy crisis, four positive steps must be taken quickly—

- A meaningful program to conserve present energy supplies must be implemented. To date, very little has been done in this regard.
- A concentrated effort to develop new sources of energy must be initiated and pursued with vigor.

  Inducement and direction must be provided to assure aggressive further development of our present major conventional sources of energy, particularly oil and gas.
- An adequate system of pipelines must be constructed to enable new sources of supply to be fed into a national transportation system for delivery to those regions of the country where present sources of energy are inadequate or may cease to be available.

OBSTACLES

"If existing obstacles are to be removed and steps taken to avert a future energy crisis, it is imperative that a new partnership be developed between governments and industry, and the Canadian people as a whole," he said.

NEW AWARENESS

On the people's part there must emerge a new awareness of the realism of the approaching energy crisis, and the need for realistic conservation, especially fossil fuels, said Sen. Manning.

"There should be a recognition of the importance of the roles of both government and the private sector must play in averting that crisis and the need for public understanding and support," he added.

Senator Ernest C. Manning

SOCIAL RESPONSIBILITY

Sen. Manning said the private sector must recognize its inescapable social responsibility to the public and the nation as a whole.

"Energy resource industries must attach at least equal, if not more weight to their commitment and responsibility to provide the nation with adequate energy supplies as they give to generating profits for their shareholders.

HARMONIOUS PARTNERSHIP

"Governments, while never neglecting their responsibility to safeguard the public's interest, must work in close and harmonious partnership with resource industries, including those engaged in transportation and marketing, to achieve the common goal of adequate and available future energy supplies," he said.

AN INTERNATIONAL SYMPOSIUM

Gas marketing ··· key to rational energy use

A rational energy policy by any nation, if it is to provide clean, efficient, economical energy to its consuming public, must recognize and build upon natural gas, Leonard W. Fish told delegates to the World Gas Conference in introducing the symposium of the International Colloquium About Gas Marketing.

Mr. Fish, President of the Colloquium and Senior Vice-President, American Gas Association, said that in the long-run, energy growth is inevitable . . . "as population increases, so will the total demand for energy."

He stated that even though gas is a preferred, high quality fuel, there has been some concern about its long-range supply outlook.

"Actually, world-wide supplies of natural gas are enormous. Geologists have estimated that there is far more gas undiscovered in the earth's crust than has been discovered so far," said Mr. Fish.

He added that in the United States alone, estimates of methane dissolved in geopressured zones range as high as a 500-year supply. In addition, high quality gas can be produced from coal, lignite, and plant matter such as seaweed. And gas may eventually be produced from sea water.

"Long-range, gas is virtually inexhaustible," he said. "But we live in the short-range, and this is the challenge of gas marketing. The advantages of gas must be explained to the government and public, and strategies must be developed to make the best use of the presently available supplies of gas," he said.

FUNDAMENTAL ADVANTAGES

The first paper presented at the symposium was by Dr. Gunther Scherzer of the Federal Republic of Germany, who said that in industry, energy saving measures must be taken in the fields of process-heat and space-heating.

"In the industrial sector the greatest energy saving through the use of natural gas is obtained because the energy needed for process heat can be produced directly by gas at the place where it is required," he said. "Natural gas can be used as a 'tool' resulting in minimum energy losses in the transformation of energy."

In addition to these immediate energy-saving possibilities, said Dr. Scherzer, the use of natural gas can have many side effects by enhancing productivity and saving energy at other places.

He stated that in the Federal Republic of Germany three-quarters of all the energy consumed is absorbed by the heating market.

"Where energy saving and conservationism are concerned, natural gas has as its object to replace those energy forms whose utilization not only requires larger quantities of primary energy, but causes greater pollution than natural gas," he said.

Dr. Scherzer said that as this task is performed in the different sectors of consumption, the question arises as to whether the objective of maximum energy saving is consistent with competitiveness and profitability.

"Since the domestic market and small consumers section account for the bulk of end-energy consumption, marketing in favor of natural gas must focus on the entire domestic sector," he stated.

PREMIUM MARKETS

The basic strategy associated with the economic development of natural gas is to dominate penetration into the premium market sectors, said Ernest A. Haynes of the United Kingdom.

He said the domestic market is especially important. His paper considered the present level of domestic appliance sales in the member countries of the Colloquium, and illustrated the scale of future potential.

"In order to achieve the objective of substantially increasing the level of gas appliance sales, greater co-ordination of effort will be required between gas industries and the appliance manufacturers," said Mr. Haynes.

He emphasized the need to broaden the range of gas equipment in order to create a greater presence and customer awareness of gas in the consumer durable market.

PUBLIC RELATIONS

Michel Hanssens of Belgium stated that the gas industry is becoming more involved every day in economic, social and environmental problems.

Public relations must help it to achieve the objectives of four key problems —

- Dependability of gas supplies in the future.
- Energy saving.
- Safeness of gas.
- Conservationism.

MARKETING STRATEGY

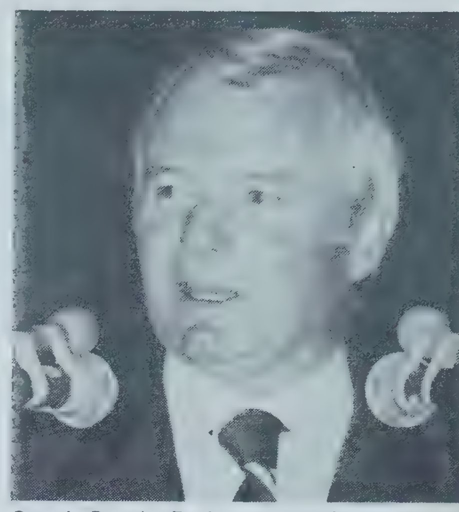
The final paper of the symposium was presented by William R. Probert of the British Gas Corporation, who stated that energy policy varies from country to country, and this is reflected in gas marketing.

"Future strategy is likely to progessively be concerned with premium applications consistent with conservation and improved use of energy," he said.

"In particular, the domestic market is identified as an important sector which is likely to command increasing attention," said Mr. Probert. "This market presents both opportunity and challenge, but is one in which gas can justifiably claim to be making a significant contribution to the rational use of energy.

VIDEO HIGHLIGHTS OF WORLD GAS CO


Dignitaries and delegates attend opening ceremonies at World Gas Conference.


Ontario Premier Davis opens Conference.


Two members of Japanese delegation.

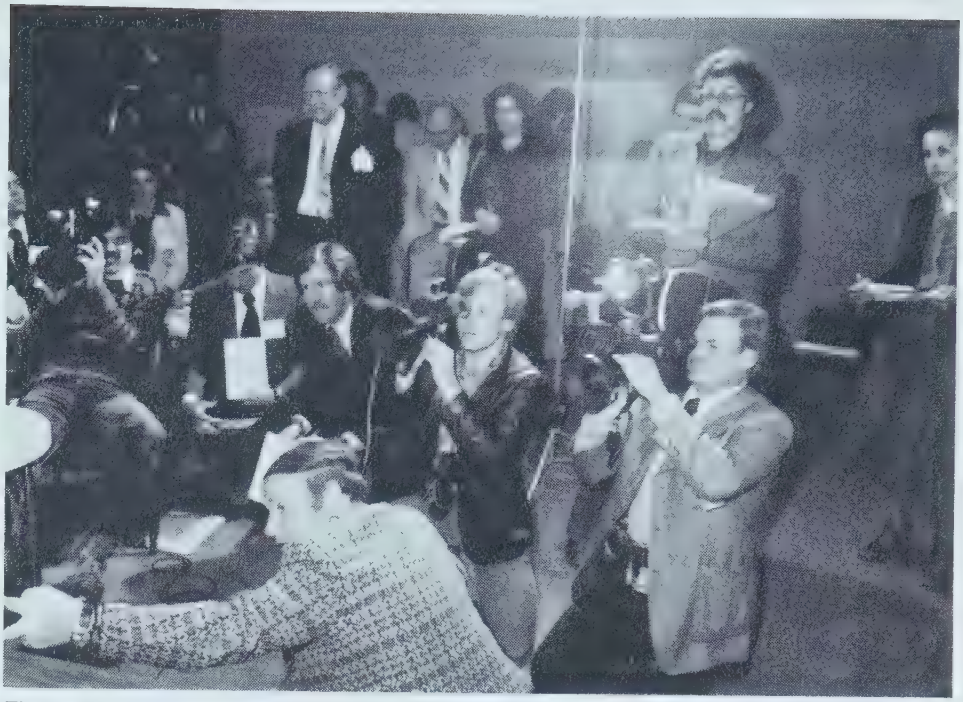

The spacious O'Keefe Centre was the scene of the opening ceremonies.


Ontario Lt. Gov. Pauline McGibbon greeted visitors . . .


IGU President-elect Eric Giorgis and his wife, Paule.

NFERENCE

Edmund C. Bovey and James W. Kerr at press Conference.



The media — press, radio and television — was active throughout the Conference.

Mrs. J. W. Kerr, Chairman, Ladies Committee and Mrs. E. C. Bovey, a co-chairman.

Opening of the Gas Industry Exhibition — George Robert, Honorary Past-President, IGU, Mr. Kerr and Mitchell Sharp, Commissioner, Northern Pipeline Agency.

TransCanada PipeLines' exhibit was well attended at Gas Industry Exhibition.

Dr. S. A. Orudjev, U.S.S.R., feted on his birthday.

IS YOUR HOME PROTECTED BY ENERGY INSURANCE?

Newly-discovered natural gas in Canada, delivered by the TransCanada PipeLines System, now offers Canadian energy consumers a measure of protection against the economic and political uncertainties of the international energy market.

Most new homes in Canada where natural gas is available are now covered by Canadian energy insurance.

A significant majority of developers and builders of Canadian homes has been installing natural gas heating, hot-water heating and cooking systems for years.

Efficient, clean-burning natural gas has proven itself to be economical to install and has been attracting home-buyers because of convenience and low-cost operation.

In recent years a dramatic new factor entered the picture.

More natural gas has been discovered in a number of locations in Western Alberta. Because of these new reserves, the people who installed natural gas systems in new homes made a wise choice.

They have, in effect, assured customers of a continuous supply of economical energy far into the future. Farther into the future than anybody would have predicted two years ago.

At a time when all the industrial nations are deeply concerned about the threat of dwindling energy supplies, the Canadian natural gas supply is an encouraging development.

Can you get "energy insurance" for your plant—or home?

Yes, you can. Right now, a powerful incentive exists to change your ways of using energy. Because abundance has created a surplus supply situation in energy. Because Canada's natural gas producers, carriers and utilities are aggressively seeking new markets for their product. Because TransCanada PipeLines is planning a major pipeline extension into Eastern Quebec and planning appropriate methods of serving Atlantic Canada with indigenous energy.

The natural gas industry of Canada is confident of its ability to supply Canada's growing industrial and domestic requirements in the long run and invites you to protect your long-term interests by switching today to natural gas, Canada's "tomorrow fuel".

The natural gas opportunity has never been better.

Natural gas is secure, reliable, clean and safe energy. It is generally competitively priced.

Natural gas is one assurance of Canada's continued growth. Share in it.

Whether you are an industrial, commercial or residential energy consumer, it is in the best interests of your company, your family and your country to take a close look at the alternatives.

What is best for you today? What offers you the most in the future?

Your local gas company will be pleased to help you make an informed decision. Call them today.

TransCanada PipeLines

NATURAL GAS
CANADA'S TOMORROW FUEL

Make the most of it. Today.

AR32

along the line

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No. 4, 1982

Correspondents

Western Area
Calgary - Ute Eggebrecht
Burstall - Collette Hegg
Cabri - Roy Thomas
Herbert - Gary Gould
Caron - Barry Huenison, Stan Boyko
Regina - Georgina Phillips
Grenfell - Orest Nawrocki
Moosomin - Bernadette Nosterud, Ken Redfern
Rapid City - Carol McLaughlin
Portage La Prairie - Harvey Fyke, Philip Lemieux
Ile des Chenes - Rhonda Booth
Central Area
Falcon Lake - Gord Elder
Kenora - Kim McCaig
Dryden - Lloyd McFadden
Ignace - Randy Dean
Upsala - Rose Mutton
Thunder Bay - Chuck Thompson
Nipigon - Bill Winterburn
Geraldton - Aksel Johnson
Hearst - Anna Vanderlip
Mattice - Ronald Begin, Phyllis Erickson
Smooth Rock Falls - John de Vries
Eastern Area
Ramore - Cleo Hébert
Haileybury - Keith Ryan, Art Seed
North Bay - Joe Williams
Bracebridge - Keith Moore, Lenore Goodfellows
Maple - Dave Cann, Richard Sampson
Toronto - Guy Andrews, Bill Moore
Aviation, Malton - Terry Redfern
Ancaster - Aubrey Marshall
Grafton - George Crumback
Kingston - Gary Peck
Candiac - Gerry Dion
Safety - Don Haworth
Affiliates
TQM - Lyse Cartier
CanCarb - Orest Tkachyk

Front Cover
Billowing sails bring thoughts of romance and adventure on the high seas. Amid today's hustle and bustle, the magic of sailing survives through the brigantine sail-training program. Here two young crew members are shown aloft. See story inside on sail-training.

Published for the employees of TransCanada PipeLines and their families by the Public Affairs Department.

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COMPANY SEEKS PERMITS TO REMOVE ADDITIONAL GAS

Expansion of markets for Alberta's natural gas took a step forward on June 28, with the commencement of hearings by the Alberta Energy Resources Conservation Board of a removal application by TransCanada PipeLines.

The Board began hearings of TransCanada's application, filed December 31, 1981, to seek permits to remove additional volumes of gas to serve new and expanded domestic and United States markets as well as a new Japanese market.

The applications, if approved, could generate revenues for Alberta's gas producers, pipeline companies and the provincial and federal governments of some $80 billion over the term of the permits.

TransCanada's applications ask for permits to remove some 6 Tcf for new markets in the U.S.—of which about 1 Tcf has already obtained first level approval for U.S. imports—some 3 Tcf has been requested for the Japanese market and additional volumes of some 9 Tcf have been requested for an extension of existing markets in Canada and the U.S. through to 1999.

"With early approval by the regulatory bodies in Alberta, Canada and the U.S., the new volumes initially will help deliveries from the over 600 producers—big and small—already producing gas for TransCanada," said R. T. Liddle, Vice President, Operations and Special Projects.

The new markets are large enough that, by the latter part of the 1980s, TransCanada will have the opportunity to augment supplies. This will mean more Alberta producers will be added to TransCanada's list of suppliers.

Mr. Liddle said that the company will demonstrate to the Board that, over the forecast period, supply will be more than adequate to serve current and projected markets.

He explained that the volume of reserves and the proven capability that TransCanada already has under contract is one factor. Another factor is that the applications, if approved, will result in generation of additional exploration and development bringing on new reserves.

"This should assure the ERCB that an adequate supply exists for both Alberta's current and long-term markets and therefore indicates that there is sufficient volume for the Board to authorize additional permits," he said.

"We are confident that early authorization of the additional volumes will be granted, given the encouraging regulatory environment in Alberta and in Canada," Mr. Liddle stated.

Six-month earnings increase -

NEB DECISION REDUCES CASH FLOW AFTER TAX PROFIT NOT AFFECTED

Company President and Chief Executive Officer Rad Latimer said that six-month earnings had increased over last year.

TransCanada PipeLines reported on August 4, that net income applicable to common shares increased by 36 per cent for the first six months of 1982 to $70,082,000 from $51,459,000 for the same period a year ago.

In the six-month report to shareholders, Company President Rad Latimer said that earnings per common share increased by 35 per cent to $1.58 per share from $1.17 for the same period last year. Funds from operations and investments increased by 17 per cent to $163,196,000 for the first half year compared to $139,857,000 for the first six months of 1981.

Mr. Latimer explained that two significant developments had taken place recently affecting the rates charged for natural gas service.

Effective August 1, the wholesale prices charged by the company were increased by the Federal Cabinet to reflect the 25 cents per Mcf increase in the price paid to natural gas producers pursuant to the agreement reached between the government of the Province of Alberta and the Government of Canada last year.

On July 30, 1982, the National Energy Board released its Reasons for Decision on an application for an increase in the tolls and tariffs charged by the company. The new tolls and tariffs provide for an increase in the rate of return from 12.63 per cent to 13.88 per cent.

"The higher tolls and tariffs result primarily from the cost of construction of new pipeline facilities," Mr. Latimer explained. "The Board reversed previous decisions and has required the company to treat income taxes on a flow-through basis rather than a normalized basis in setting its rates.

"This change in the treatment of income taxes will not affect the after tax profit of the company, but will significantly reduce cash flow. The July 30 decision of the Board will not come into effect for domestic sales until acted on by the Federal Cabinet but is expected to be effective by September 1."

Mr. Latimer said that construction of the company's North Bay Shortcut pipeline along a new route in the Ottawa Valley is proceeding on schedule, and the $450 million project will be ready to serve eastern Canadian customers later this year.

Construction of 186 kilometres of new pipeline facilities in Saskatchewan and Manitoba, which began in June, is also underway.

"These facilities, which were included in the company's facilities application heard earlier this year, will be in service this fall," Mr. Latimer added.

Commenting on TransCanada's proposal to natural gas producers made earlier, Mr. Latimer announced that on July 26, 1982, the Alberta Petroleum Marketing Commission gave approval to the company to permit interest costs on refinancing take-or-pay obligations by a consortium of banks to be included in TransCanada's Alberta Cost of Service.

"This decision will make it possible to provide producers with significant additional cash payments in 1982 while virtually eliminating TransCanada's obligations to pay for additional undelivered gas," he said.

Mr. Latimer said that the company's share of income from investments in oil and gas declined in the second quarter.

"This reflects the impact of higher financing costs, slightly lower earnings from the inclusion of TransCanada's 12.5 per cent undivided interest in substantially all of the assets of Hudson's Bay Oil and Gas Company, and lower sales from the remainder of TransCanada's properties," he added.

"Construction of Trans Quebec & Maritimes Pipelines facilities between Boisbriand and Trois-Rivières will be complete this fall," Mr. Latimer noted. "Trans Quebec & Maritimes has also awarded contracts for the construction of the pipeline beyond Trois-Rivières to Quebec City."

COMPANY BOARD MEETS TO DISCUSS IMPLICATIONS OF FLOW-THROUGH ACCOUNTING

The Board of Directors of TransCanada PipeLines met on August 6 to consider the implications of the National Energy Board's decision to place the company on flow-through accounting for utility income taxes.

Although the decision will not materially affect the company's net profits from existing operations, the expected reduction in cash flow caused the Board of Directors to ask management to reassess future investment plans.

The drastic change in regulatory practice could erode the company's ability to carry out the important projects that had been planned under normalized tax treatment previously approved by the National Energy Board.

TransCanada expressed surprise at the removal of such an important financing component of new investment at a time of high unemployment and declining investment.

UPRECEDENTED GROWTH IN CONTINUING EDUCATION -

INVESTING IN YOUR FUTURE

By: Erv Wittrock, Personnel Department

Surveys indicate that Canada is witnessing unprecedented growth in continuing education as adults of all ages are returning to the classroom. Above is a classroom scene from a recent company-sponsored workshop.

In Canada today, we are witnessing an unprecedented growth in continuing education as adults of all ages are returning to the classroom, either full or part-time, in record numbers.

Seneca College in Toronto reports that enrollment in part-time courses and programs of study has increased by an average of 21 per cent during the last three years. Other colleges and universities throughout the country are experiencing similar increases.

The expansion of educational opportunities available to the adult learner, both in quality and quantity, is most certainly contributing to the increase in participation. However, there are other and more fundamental reasons for returning to the classroom. Many of these ''born again students'' are pursuing new education opportunities for career advancement. Others, simply have to return because changing technologies and social conditions have severely eroded marketable working skills, making retraining or upgrading necessary for personal economic survival.

Whatever the case, TransCanada's recent experience is no exception. Popularity in using the company's Education Refund Plan to further one's education has reached a new high. Education refunds in 1981 surpassed that of 1980 by 17 per cent and the number of refunds already processed this year indicates an even higher increase for 1982. At the same time, the number of employees requesting education counselling from the Personnel department is also on the rise.

Some of you reading this article, are now saying — ''an Education Refund Plan, I didn't know we had one.'' Well, allow me to explain. TransCanada wishes to encourage and aid employees in continuing education and self-development by providing financial assistance.

The Education Refund Plan will provide reimbursement in the amount of 100 per cent of the costs of tuition, required textbooks, exam fees and in some cases, supplies. To be eligible, you must obtain prior approval before enrolling in the course. This can be done by completing an Education Refund Application Form (TCPL 928-1) and obtaining the indicated approvals.

To obtain your refund after successful completion, simply complete a Personal Expense Report for the appropriate amount, attach applicable receipts and documentation, then forward it to the Personnel department. Your refund will follow in a short period of time.

Now you ask, what courses are eligible? Generally speaking, eligible courses include those related to improving your technical background, acquiring professional designations, recognized post-secondary extension courses and general academic upgrading programs. Exclude those courses which are hobby, recreational or home-oriented.

Sounds difficult to qualify for reimbursement? Many employees believe this is the case. In fact, the exact opposite is true.

Acceptable courses and programs of study are not just limited to those which are directly related to current job duties and responsibilities. The scope of the Education Refund Plan is very much broader. For example, recently approved courses include: an Engineer enrolled in the R.I.A. program; a Secretary in Computer Science; a Field employee in Refrigeration Servicing and an Accountant in a B.A. program.

On the same note, it would be quite possible for any employee to obtain approval for programs in Business Administration, Foreign Languages or any other general interest courses offered by recognized educational institutions. Likewise, a Secretary could enroll in Electronics; a Systems Analyst in Creative Writing or a Geologist in Accounting. Correspondence courses are also accepted.

As this issue of Along The Line reaches the press, the academic year will be fast approaching. Like many other Canadians, join the bandwagon. Help yourself by investing in the future!

Appointments

Alex Bercovici

J. J. Robinson

Paul Bailey

C. E. Rubie

R. J. Suchan

D. J. Jensen

T. M. Nigh

Bercovici President TransCan Holdings

Alex Bercovici was appointed President of TransCan Holdings, effective July 1, 1982.

The company's principals are as follows:

Directors:
R. R. Latimer, A. Bercovici,
J. M. Cameron
Officers:
R. R. Latimer, Chairman and Chief Executive Officer
A. Bercovici, President
D. M. Johnston, Secretary
H. N. Nichols, Treasurer

In his new capacity, including the responsibility for all off-shore operations and European companies, Mr. Bercovici will relocate to Europe and will continue to report to R. R. Latimer, TransCanada's President and Chief Executive Officer.

Pipeline Division Accounting

In line with a reorganization within the Accounting department, the following appointments were recently announced by R. S. Smith, Vice President and Controller - Pipeline Division.

J. J. Robinson was appointed Senior Manager, Pipeline Accounting.

In this capacity Mr. Robinson will be assigned special accounting projects.

Mr. Robinson will continue to be responsible for the Printing department and will report to Mr. Smith.

Paul Bailey was appointed Senior Manager, Plant Accounting and Administration.

Mr. Bailey, most recently, was Superintendent - Business, Hydraulic Generation and Transmission Division for Ontario Hydro. He will be responsible for Plant Accounting, the Insurance and Property Taxation departments and the Office Services department.

He will report to Mr. Smith.

C. E. Rubie was recently appointed Manager, Plant Accounting.

Mr. Rubie joined TransCanada in 1969 after graduating from the University of Western Ontario and qualified as an RIA in 1975. He has progressed through increasingly responsible positions within the Treasury and Accounting departments.

Mr. Rubie will report to Paul Bailey, Senior Manager, Plant Accounting and Administration.

R. J. Suchan was recently appointed Assistant Manager, Plant Accounting.

Mr. Suchan joined TransCanada in 1964 in the Systems and Data Processing department and has successfully progressed through several positions in that department, more recently as Assistant Manager. He obtained his RIA in 1969.

Mr. Suchan will report to C. E. Rubie, Manager, Plant Accounting.

D. J. Jensen was recently appointed Assistant Manager, Coding and Payables.

Mr. Jensen joined TransCanada in 1965. Since that time he has held several positions in the Accounting department and since early 1976, with the Polar Gas Project, where he was appointed Assistant Manager, Accounting in February, 1981. He obtained his RIA in 1973. Mr. Jensen will continue to be responsible for the financial records and reports for the Polar Gas Project.

He will report to D. W. Jagges, Senior Manager, General Accounting.

Corporate

T. M. Nigh was recently appointed Supervisor, Long-Term Financial Planning in the Corporate Financial Planning department.

Mr. Nigh, who joined TransCanada in June, 1981, has broad experience in long-term financial planning and financial systems development. He is a MBA graduate from the University of Western Ontario (1976).

In his new capacity, Mr. Nigh will be responsible for the supervision of the Long-Term Financial Planning area, which will maintain and operate the Corporate Financial Model and prepare all corporate long-term financial forecasts.

Mr. Nigh will continue to report to S. A. Wooldridge, Director, Corporate Financial Planning.

TRANSCANADA STREAMLINES MOBILE RADIO NETWORK

A program to update the company's telephone and mobile radio equipment across the system is now complete. Using a vehicle's mobile radio is now as easy as using a telephone.

The most significant design change, compared to the old system installed in the mid-1960's, is the use of standard telephone touchtone protocol. By using touchtone signals for the mobile radio system, more flexibility is achieved and radio calls are as easy as standard telephone calls.

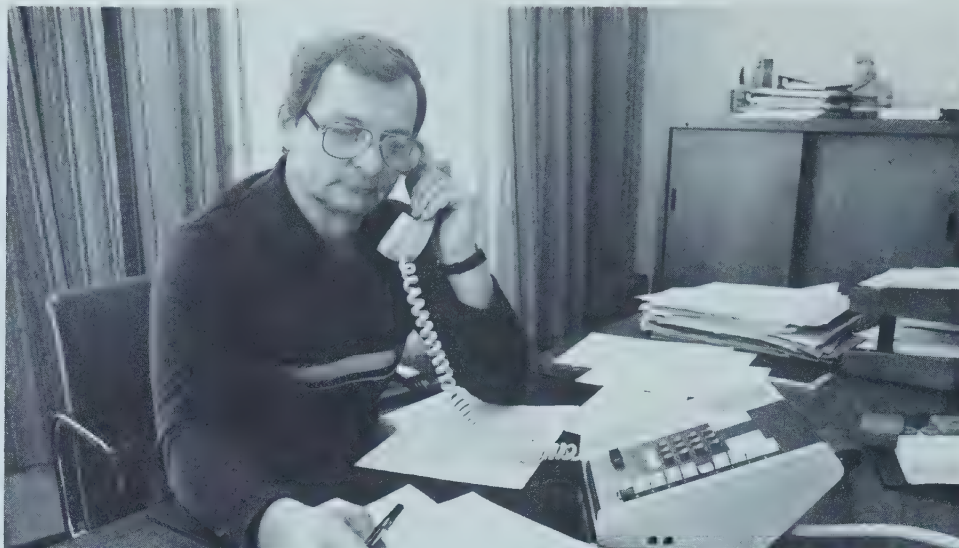
A prototype of the new system was installed in District 142, Kingston in August, 1981. It was successful, and all remaining Districts were changed in phases, starting in April, 1982.

The new system was developed by Senior Engineer Ray Hobson, Compression-Station Facilities. Ray organized training sessions to coincide with the changes and video training tapes were distributed to all field sites.

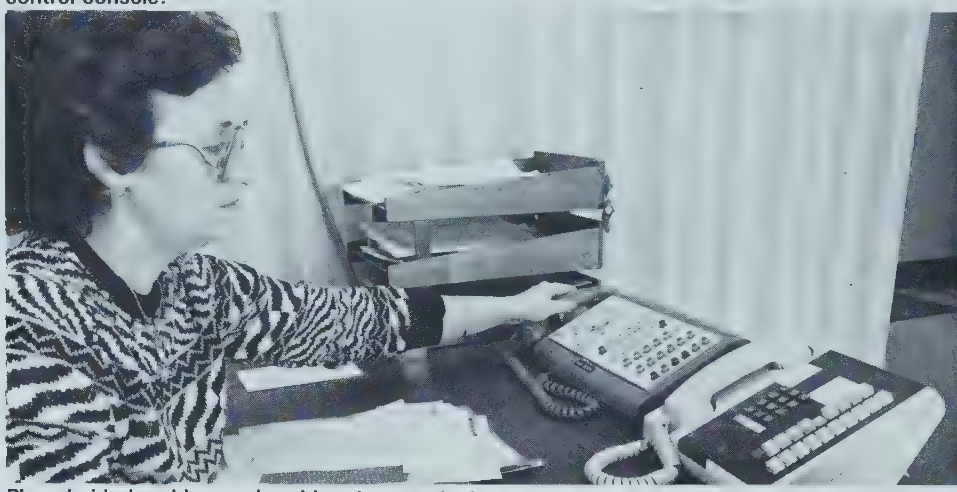
Voice communications at TransCanada are handled through a number of different services. Each service is retained for a specific purpose, all integrated to provide fast, reliable voice communication in the event of an emergency. Services to provide company requirements are leased on a long-term basis from the various telephone companies along the pipeline.

Voice communication with company partrol planes is also integrated in the new radio network. This has eliminated many of the interference problems which previously occurred when making a company radio call while flying.

The new system allows for more calles on the radio network and provides automatic connection to the company's Voice-com telephone system connecting all stations. Improved equipment reliability and simplified operation and maintenance combine to make TransCanada's system more secure.



District Manager Louis Lessard, Kingston, uses a new Logic 10 telephone set. Since each set is equipped with touchtone, all types of mobile radio calls can be accomplished without a large control console.



Placed side by side are the old and new telephone control consoles. District 142 Clerk Helen Ritchie answers a call on the old console. The new type telephone, on the right, is a standard Logic 20 set with touchtone.

In order to minimize downtime while changing from old to new type mobile radios, dual capability was provided in each vehicle. Shown above is the interior of a TransCanada vehicle equipped with a dual capability mobile radio. The touchtone pad on left, which is an integral part of the microphone, allows the user to place calls on the new system. The box with five buttons (A-E) is an encoder, used to place calls on the old system. This box was removed when the company's system was completely changed.

MANAGEMENT SEMINARS HELD TO DEVELOP SKILLS AND STYLE

Executive Vice President J. M. Cameron, top left, conducts a session on "Planning for the future", at a recent management seminar.

TransCanada has been conducting a series of Management Seminars recently which are designed to aid participants to develop their own management capability.

A recent Management Seminar was held for those holding manager positions or the equivalent, who have had some exposure to the subject of management in courses originating outside the company.

The objectives of the company in providing these management courses are:

(a) to help the participants examine their management skills and style and consider modern ideas, concepts and techniques in the context of the company's operation and management;

(b) to stimulate the participants to develop their own management capability through a review of skills and commitment to a personal development plan;

(c) to provide participant with information on the company's corporate objectives, policies and strategies through presentations by representatives of senior management.

The management course is conducted during a full-week period in one month and a second part is held for a three-day period about a month later. Courses are held outside the office environment.

The content of the course consists of (a) presentations on management techniques in the context of the company's activities and operations, and (b) briefings by seminar company staff members on the function of their department.

These courses were designed and conducted by Jim Radford of Jamieson & Radford Consultants Ltd., in conjunction with TransCanada's Personnel department.

In full sail, the brigantine Playfair, also shown on front cover, glides past the Toronto waterfront, taking its crew on a memorable adventure.

BRIGANTINE PROGRAM PROVIDES -

Adventure of a Lifetime

The words solitude, peacefulness and magic ring clearly when one travels by the sea.

In today's modern age, speed and efficiency seem to be the main priority to many who travel. Yet the magic still survives through the Brigantine sail-training programs offered on the 'Pathfinder' and 'Playfair' in Toronto, and the 'St. Lawrence II' in Kingston, Ontario.

These 60-foot, steel hulled, square rigged vessels were built in Kingston (St. Lawrence II 1960, Pathfinder 1962 and Playfair 1972) and offer programs to both youth (14 to 18) and adults who seek adventure, freedom and mostly a challenge.

From the moment one steps on board, he or she becomes part of the ship, only to find that not too far down the road the ship becomes a part of them.

With 10 fully trained officers, and up to 18 crew members, one begins to 'learn the ropes' right away. Watches are instilled at the beginning of the crews, concentrating on seamanship, navigation, safety and weather conditions.

Most importantly, the students learn teamwork and working together under adverse conditions. Living, sleeping, eating, laughing and learning in an environment that is both exhilarating and tough, can only offer very unique experiences.

Mike Pretsell, Temporary Maintenance at Station 130, Maple, fondly remembers the summer he spent, several years ago, as a crew member on the St. Lawrence II, stationed in Kingston.

Mike signed on in the winter and helped refurbish the brigantine for the summer program. He was one of four 2nd officers and enjoyed the challenge of keeping the ship on-course, when in command of an eight-hour shift.

Mike highly recommends that teenagers, 14 to 18, should consider participating in this sail-training program. He agrees that it's "an experience you never forget."

The sail-training season begins in May and goes through to October with two-week programs and charters available. If you would like to enquire about these programs, you may write to: Toronto Brigantine Inc., 283 Queens Quay West, Toronto, Ontario, M5V 1A2; or Brigantice Inc., Portsmouth Olympic Harbour, 53 Yonge Street, Kingston, Ontario, K7M 6G4.

Art Keay is flanked by Beth Bryan, left, and Audrey Yorke, along with many other Toronto employees who came out to greet this marathon walker.

KEAY MARKS POLICE ANNIVERSARY WITH 100 MILE WALK FROM BUFFALO

To promote the 100th anniversary of the Toronto Police Amateur Athletic Association, Art Keay, retired Transportation Officer, from Toronto office's Purchasing department, walked 100 miles from Buffalo to Toronto.

Art started the walk in Buffalo on July 18, and arrived at Toronto's City Hall on July 21, at 12:30 p.m. This event also helped publicize the Toronto Police Games, held July 24th.

On the way up Bay Street, Art stopped at Commerce Court to be greeted by many Toronto office employees who offered congratulations on his final lap to City Hall.

Awards and achievements are no stranger to Art Keay. Earlier this year, he was presented with a Special Achievement Award by the Government of the Province of Ontario.

Art, who reached 75 years of age on March 19, retired from TransCanada in 1973. The Special Achievement Award was presented at a provincial dinner, held May 7, to individuals who make an outstanding contribution to the field of fitness and amateur sports over a period of many years.

In addition to a scroll, Art's citation in Track and Field, reads:

''Since representing Canada at the 1928 Amsterdam Olympics, Art has worked diligently towards the betterment of Track and Field, especially in the role of race-walking official. He has officiated at many track meets and has embarked in marathon walks countless times, in aid of benefits for the police widow's fund. Art has become a familiar part of the morning rush hour along Bayview Avenue, no, not for driving but stepping briskly in that familiar race-walk swagger. For epitomizing a healthy life-style through walking, the Province of Ontario says ''thank you'' to Art Keay.''

He was also presented with a large bronze medallion and lapel pin. The presentations were made by Reuben C. Baetz, Ontario's Minister of Tourism and Recreation.

Art Keay, left, is presented with a Special Achievement Award by Reuben C. Baetz, Ontario's Minister of Tourism and Recreation.

cross country

CALGARY

Correspondent: Ute Eggebrecht

Parting Company

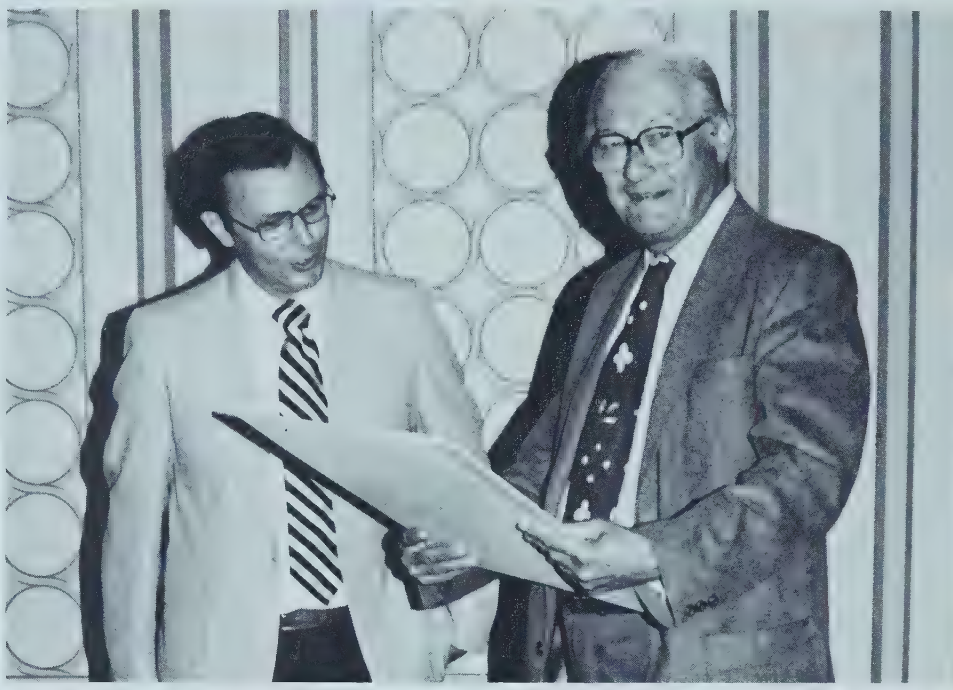
A combination retirement and farewell luncheon was held in honor of **Ted Watkins,** Coordinator of Office Services, Calgary, on June 18 at the Westin Inn.

Joining the company in 1976, Ted worked with the Polar Gas Project in Toronto as an Engineering Designer. In April 1980, he joined TransCanada's Calgary office where he assumed his current position.

Prior to joining the company, Ted had established his own architectural firm, first in Vancouver (1956-70) and later in Toronto (1970-76). Many fine examples of his work can be seen in buildings throughout the provinces of British Columbia, Alberta, Ontario, New Brunswick and Newfoundland.

Ted studied architecture at the University of Toronto from 1945 to 1950, after serving as a pilot with the Royal Canadian Air force from 1940-45.

Originally from Vancouver, Ted has recently returned to his beautiful hometown to pursue his interest in architecture.



John Odlum, left, Assistant Manager, Personnel, presents Ted Watkins with a humorous farewell card from his staff.

''Ted has no intention of retiring,'' reports Correspondent Ute Eggebrecht. ''As well as pursuing his interest in architecture, Ted is looking forward to putting his watercolor brushes to work again.''

He was presented with a set of watercolors by his fellow employees and well-wishers at the luncheon.

Co-workers look on fondly as retirement presentation is made to Ted Watkins. Well wishers are, from left to right, Alice Shannon, Paul Stein, Penny Hemmingson, Dave Hesson and Anne Martin.

A swinging time at Fairmont

The annual Mallabone Golf Classic, held recently at Fairmont Hot Springs in British Columbia, attracted 36 TransCanada Calgary office employees.

After five matches during the two-day tournament, **Barry Luft**, Manager, Deliverability, emerged as the winner of the Championship Flight.

Other Flight winners include: **Garry Marshall** - Second Flight, **Brent Syme** - Third Flight, **Howard Mallabone** - Fourth Flight, **John Anthony** - Fifth Flight, **Dennis Lee** - Sixth Flight, **Len Jaskula** - Seventh Flight and **Jim MacNicol** - Consolation Flight.

The weatherman co-operated; the no-swimming signs at the water holes paid off; occasionally the 30.48 cm (12 inch) putts were missed; and the flat pole sometimes stopped a ''fly'' ball heading for a sand trap.

It was an event well worth the 3-1/2 hour and 290 kilometre drive.

MEET OUR CORRESPONDENTS

KENORA

Kim McCaig finds that being a Correspondent is good way to develop communication skills.

Kim McCaig

"I wanted to be a Correspondent because I thought it would be a good learning experience and a way of improving my communication skills," said Kim McCaig, Correspondent for Stn. 49, Kenora.

"I wanted to learn how to write articles," added Kim, "because it ties in with my work. As a District Clerk, I have quite a bit of writing to do and I thought it would be good practice.

Kim has worked at three different locations since he joined TransCanada in 1974 and feels that this experience has given him "a better feel for employees."

"Working in a big center like Winnipeg, I found that employees had a lot of interests outside the company, while at Geraldton (Stn. 80), there is more of a family feeling among employees", said Gary.

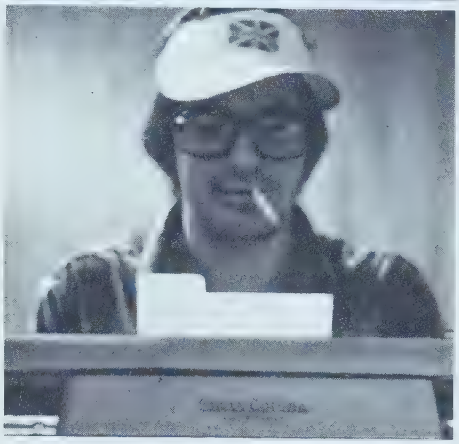
"A station like Kenora (49) is different yet again," he added, "because it is located in a big tourist center. The location makes it difficult to plan social events during the summer months and therefore there is very little to report until the winter."

"Since I am new at being a Correspondent," added Kim, "I would appreciate any help by way of pictures or suggestions for articles."

Kim enjoys participating in all sports but says, "Since I'm a new father, I find that learning how to be one is taking up most of my time.

"I feel that most employees enjoy reading Along The Line," said Kim. "And everyone likes to see an article on their particular location. My objective, therefore, is to try and have at least one article submitted per issue."

DRYDEN



Lloyd McFadden has been reporting the news for Stn. 55 for the past year and a half.

Lloyd McFadden

"I took on the position of being the Correspondent for Stn. 55 because there hadn't been a Correspondent for Dryden in a long time," said Lloyd McFadden.

"I've found that I like being a Correspondent," he added. "But sometimes it's hard to find things to write about."

Lloyd was recommended to be the Correspondent for Stn. 55 about a year and a half ago by the Mainliner Club executive and he has been doing a fine job ever since. He was a likely choice because he has had some previous writing experience and his hobby is photography.

"I have a black and white darkroom setup," said Lloyd. "And I am just getting involved in the Cibachrome process of making prints from slides.

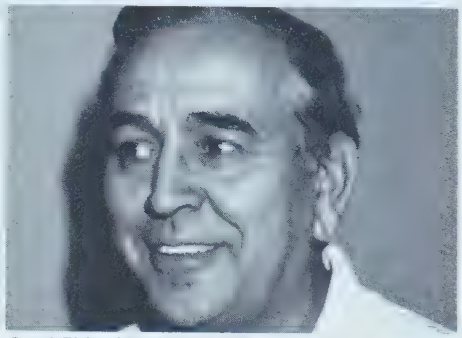
"It all started four or five years ago, when my wife bought me a camera as a wedding present," recalls Lloyd. Since then he has invested in several additional cameras and usually carries one around him with him at all times.

Lloyd especially likes taking pictures of children, animals and flowers. Last year he won first price in the Children's category of the 'Along The Line' photo contest and he was the runner-up in the Scenery/Still Life category in 1980.

Lloyd's background in writing includes writing short stories in high school and he is currently submitting photo-essays to various outdoor magazines.

As well as pursuing his interest in photography and writing, Lloyd keeps fit by playing fastball in a local league during the summer.

FALCON LAKE



Gord Elder has been a Correspondent for Stn. 45, Falcon Lake for almost 10 years.

Gord Elder

"I was asked to become the Correspondent for Stn. 45 in 1973 when the previous Correspondent moved to British Columbia," recalls Gord Elder.

"I guess I was approached to take on the position because at that time I was taking a lot of pictures for the magazine. Photography has always been a hobby of mine and back in '73 I was the only one at the station using a 35 mm camera," remembers Gord.

When asked what he liked best about being a Correspondent, Gord replied, "I like it when I can get an article in the magazine which covers a lot of people and a lot of events at the station."

When asked what challenges he has encountered in his position, Gord replied, "I guess the toughest part of being a Correspondent is getting people at the station to participate and getting feedback. I've got to dig for it. Generally, however, I find the more input I give, the more satisfaction I receive," said Gord.

Gord is currently a Technician E/M at Stn. 45 and has worked at Falcon Lake since he joined the company as a Maintenance employee in 1968. Last year, Gord was also elected president of the Stn. 45 branch of the Mainliner Club.

Along with his commitment to company programs, Gord Elder is also very active in community affairs. He has been president of the Reynolds Community Club for 10 years and is currently the Club's Treasurer. Gord has also served on the St. Anne Hospital Board of Directors.

As well as keeping up with these various social commitments, Gord manages to pursue his interest in science, astronomy, music, dancing and reading science fiction.

MOOSOMIN

Correspondent: Bernadette Nosterud

Dave Reid (left), Western Area Manager, congratulates Gil Leslie and Nancy Reid on winning the 'Two Ball Foursome' event and presents them with 'first place' plaques.

Fifteen-year-old Kevin Temple, son of George Temple, poses for a presentation picture with Sub-District Manager Gil Leslie, after winning the Area Manager's trophy for the men's low gross event.

Jean Baily is all smiles as she holds up the Sub-District Manager's trophy she won for the women's low gross event.

WESTERN AREA GOLF TOURNAMENT

''The second annual Western Area Family Golf Tournament was once again an overwhelming success,'' reports Correspondent Bernie Nosterud.

The tournament and barbecue was held at Kenosee Lake in Saskatchewan Moose Mountain Provincial Park and was expertly organized by the District Managers.

Some 50 men and women from stations 13, 21, 25, 30, 41 and the Western Area office competed in the tournament, which ended with a ''Two Ball Foursome''.

The ladies low gross was won by **Jean Baily,** wife of Norm Baily, District Manager, Stn. 25, who received the Sub-District Manager's trophy, while 15-year-old **Kevin Temple,** son of George Temple, Technician M, Stn. 21, won the men's low gross event.

The ladies low net went to **Doreen Leslie,** wife of Gil Leslie, Sub-District Manager, Stn. 41, and the men's low net was won by **Art Hunt,** Supervisor, Sub-District, Stn. 21.

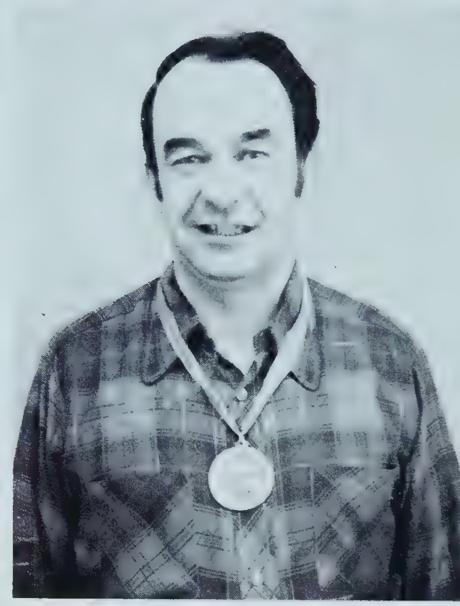
Winners of the ''Two Ball Foursome'' were **Gil Leslie** and **Nancy Reid,** wife of Dave Reid, Western Area Manager.

The evening barbecue attracted close to 90 people and included the presentation ceremonies for tournament winners.

''Based on this year's success,'' reports Bernie. ''This will definitely be an annual event. Golfers are already busy practising for next year's tournament.''

IGNACE

Correspondent: Randy Dean



Peter Jaworski sports gold medal he won at Lake Placid.

Peter Jaworski wins gold medal

Congratulations to **Peter Jaworski,** Supervisor, Stn. 58, Ignace, on winning a gold medal at the recent Canadian/American Adult Hockey Tournament held in Lake Placid, New York, from April 15 to 18.

Peter, who plays center position, has been a member of the Ignace Northern Knights Hockey Club for the past four years and participated in the tournament for the first time this year.

The team won the gold medal in the 'E' Division after winning five straight games against the New York and Philadelphia teams.

This annual event is sponsored by Hockey News magazine and is held for amateur hockey teams comprised of players 35 years of age and over.

Fish Derby & Fry

The annual Stn. 58, Ignace, Fish Derby and Fry was held at Sandbar Provincial Park, 10 km from the station, on May 29.

The weather was clear and warm and everyone who caught fish donated them to the fish fry at the end of the day. Pop and hot dogs were provided for the kids.

Approximately 20 people attended the event and everyone was given a chance at winning a prize in the derby, via a 'hidden weight' contest.

The winner of the Pickerel category was **Barb Robinson**, wife of Wayne Robinson, Maintenance, Stn. 60. The biggest catch in this category weighed in at two pounds, 10 ounces. The runner up was **Einar Johnson**, Assistant Welder, and his son, **Andy**, who is currently working at the station as a summer student.

Winner of the Jack Fish category was **Roy Fuller**, Technician, and the runner up was **Barb Robinson**. The biggest actual catch in this category was a five pounder.

Other prize winners included **Einar Johnson**, who won a tackle box as a door prize, and **Penny Bruval**, wife of **Brent Bruval**, Technician M, who won a cooler in a raffle.

HERBERT

Correspondent: Gary Gould

Employee's daughters excel at music festival

Three children of Stn. 9, Herbert's employees showed real style when they performed at the 53rd annual Saskatchewan District Music Festival held in Swift Current from March 16 to 20.

Kimberly and **Karen Yeske**, daughters of Sharon and Wes Yeske, a Technician at Stn. 9, and **Rhonda Gould**, daughter of Dora and Gary Gould, Utility, won top marks at the festival, which was organized and sponsored by the Saskatchewan Music Festival Association.

All three girls competed in the Spinet (electronic) Organ Solo category but they performed in different age groups. In some cases they had to compete against as many as 22 other performers.

Karen Yeske, age 11, won First prize for her accomplished recital of the test piece, "Julida Polka", and attained an "A" grade for her performance of pop song "Sir Duke", in the 10-year-old and over category.

Karen Yeske, holding certificate, and Kim Yeske, both won top marks in the 10-year-old and over, organ competition.

Her 13-year-old sister, Kim, also scored an "A" grade for her solo performance of pop song "If", and received an "A" for her recital of the "Julida Polka".

Rhonda Gould, age 10, came in first in both the test piece competition and the "free choice" category, for the 10-year-old and under category.

Rhonda played Beethovan's "Theme from the Seventh Symphony" for her test piece and selected pop song "More" for her second solo piece.

The girls have been taking organ lessons in Swift Current for several years and Rhonda has been putting her talents to work by serving as a substitute organist for a local church in Herbert.

Everyone at Stn. 9 is very proud of their accomplishments and wish them well in their future musical pursuits.

Rhonda Gould proudly displays the certificates she won for placing First in the 10-year-old and under, organ competition.

SAFETY

Correspondent: Liz Palmberg

Stereo headphone sets can be fatal

Several months ago a Mississauga teenager was killed when he walked in front of a GO train at a level crossing near Streetsville, Ontario.

The boy was wearing a stereo headphone set at the time of the accident and was presumably oblivious to the sound of both the on-coming train and the shrill warning whistle, because of the loud volume on his headset.

"As a passenger on that train," said **Liz Palmberg**, Safety Analyst, Toronto office, "I found it terribly upsetting, as I'm sure the train engineer did.

"I see so many kids with these headsets on, riding bicycles and walking in busy sections of town, so engrossed in their music that they are unaware of what is happening around them. This can lead them into some very dangerous situations, not to mention the risk to their sense of hearing. I would like to alert employees who have children of that age to these dangers, and to relate the warning issued by the Canada Safety Council recently, regarding the potential hazards of these portable headsets."

The Safety Council warning states that, "there is nothing inherently wrong with the headphone equipment from a safety standpoint — the problems arise as a result of the way some headphones are used. People create these problems."

The Council advises, therefore, that headphones should **never** be worn within a traffic environment - a safety precaution which applies equally to pedestrians, motorists and anyone riding a bicycle or motorcycle.

An article in a recent issue of the 'Canada Safety Council Bulletin' ('What's Wrong With Stereo Headphone Sets?') points out that, "We use our hearing second only to our eyesight in the amount of information we take in for driving safety. When that hearing is artificially impaired, trouble is seldom far ahead."

There is no denying that there are many benefits to this new technology, such as enabling people to listen to music of their choice without obligating others to listen. However, this equipment should be used sensibly.

Perhaps, if this warning can be heeded, the tragedy of the Mississauga teenager can be avoided.

ILES DES CHENES

Correspondent: Rhonda Booth

Time Flies

It's hard to believe how quickly time flies.

It seems like only yesterday that **Jack Hendry,** Utility, started work at Stn. 41, Ile des Chenes. Yet, a few months ago a party was held in Jack's honor to commemorate his retirement and his impressive record of 23 years of service with the company.

''It was 23 years of a good life with the company'', says Jack.

Jack officially retired in March, at age 63, but he plans to ease into retirement by working in the summers and taking the winters off.

Retirement plans for Jack and his wife, Evelyn, include spending more time with their son, Jack Jr., and his family, travelling, and enjoying Jack's favorite pastime — watching hockey.

''Jack's only regret is that hockey is not a year-round sport,'' reports Correspondent Rhonda Booth.

''Jack is well-liked by his co-workers and comments such as 'he's a great guy,' 'a good worker' and 'a real gentleman' cropped up repeatedly as I interviewed his associates,'' said Rhonda.

The Hendrys' popularity was also evident by the large turnout at a retirement party held on February 27 in their honor. Close to 100 people attended the banquet held at the Dakota Hotel in

Jack Hendry, right, and the late Jim Cory standing in front of Stn. 34, Portage La Prairie, in 1960.

Winnipeg; including guests from Stn. 34, Portage La Prairie.

Bud Rolick, Central Warehouse, did a fine job as the master of ceremonies, while **Gordie Gibson,** Utility, **Bob Mitchell,** Utility, and **Stan Judson,** Area Safety Co-ordinator, had everyone in stitches with tales of Jack's various adventures on the line.

Dave McClenaghan, Distric Manager, and **Gil Leslie,** Sub-District Manager,

Jack and Evelyn Hendry pose for a photograph in their home, for correspondent Rhonda Booth.

had the honor of presenting the Hendrys with various farewell gifts, including a new television set, on behalf of fellow employees and the Mainliner Club.

Everyone at Stn. 41 wishes Jack and Evelyn a long and healthy retirement.

''Incidentally Jack, when you're not busy, Stn. 41's hockey team could use two more loyal fans !''

Introducing — The Purr-fect Employee

I'm purr-fectly delighted to meet y'all. My name is **Morris Katz,** employee number 007. My job title is Rodent Control Director and I work at the Western Area Aviation hanger. I also greet strangers (some not too warmly) and at the end of a weary day I take pride in comforting tired, edgy personnel. I have served the company well in this capacity for seven years, without complaint.

My human savior and benefactor is **Rod Craven,** Pilot, who heroically saved me from certain death, starvation and despair in my early kittenhood. He is also the one who so kindly offered me the position I have with TransCanada.

Morris presents his employee card for identification.

Morris and friends. From left to right, they include Rod Craven, John Wainwright and Al Hansen.

Gradually, with my purr-suasive charm and good looks I have also won over **Al Hansen,** Supervisor, Western Aviation, and **John Wainwright,** A/C Engineer. My only complaint about my three co-workers is that their sense of humor is sadly lacking when they find me in one of their ''big birds''. These particular creatures are not much of a taste treat but their sleeping accommodations are oh, so cozy. They refuse to let me nestle in, however, saying something about my hair getting on their clean uniforms.

Generally speaking though, I think they are purr-ty great guys. They feed me well, they play with me and just so long as they don't take me for a car or truck ride, I think I'll stay on here.

Note: Our thanks to **Inez Parr,** Aviation, Malton, for suggesting this story.

ILE DES CHENES

Correspondent: Rhonda Booth

View of one of the two company Piper Aztec planes housed in the hangar, as seen from the runway.

Western Area Aviation Crew Enjoying New Quarters

After 25 years of sharing cramped quarters in various rented aviation hangars, the Western Area Aviation crew is alive and well and enjoying the new company built and operated hangar.

Located at the Winnipeg International airport, the new hangar is the first company owned hangar on the system.

"It's a great improvement," said both **Al Hansen**, Supervisor, Western Aviation, and **Rod Craven**, Pilot.

Designed to meet specific company needs and corporate standards, the hangar houses two Piper Aztec E patrol planes, two offices and a small staff lunchroom. The structure, designed and built by company engineers, is rather unique, looking more like a modern office building than an airplane shelter.

The total building size is approximately 18 m (60 feet) by 30 m (100 feet) and took seven months to complete. The crew moved into the building in December 1981 and the finishing touches and interior decoration were recently completed.

The advantages of having a company-owned hangar are that: it enables the Aviation department to build the hangar to fit specific company needs and control its operation, control snow removal, and to virtually eliminate a very costly and time consuming disease known as "hangar rash". This condition affects planes which share extremely close hangar quarters, and results in broken wing tips, broken lights and windows, scrapes and scratches and other minor damages.

"Since we've moved into our new quarters, the hangar rash problem has been almost totally eliminated," said Al Hansen.

Before building this new hangar, the Western Aviation department shared quarters with anywhere from five to 100 planes from other companies and the crew was housed in somewhat cramped and drafty quarters.

John Wainwright, A/C Engineer, who is responsible for keeping the planes in good, safe working order summed up his new environment as being, "lovely, comfy and WARM!"

Correspondent Rhonda Booth visited the hangar recently and reports that, "The hangar has large, bright windows which light the two staff offices and lunchroom and face a densely wooded area. If you're lucky, you can catch sight of the deer and other wildlife which inhabit the area."

The new hangar is also in one of the safest airport locations — it's situated next to the RCMP Air Division.

"It's a very proud and happy Aviation crew that resides in the new hangar," reports Rhonda, "and we wish them many safe and happy years flying the line."

Al Hansen, left, Rod Craven, center, and John Wainwright, pose for a picture in one of the new hangar offices.

THUNDER BAY

Correspondent: Chuck Thompson

A Happy Occasion

"The best way to describe the wedding of **Mary Armenti** and **David Horne** was that it was a very happy occasion," reports Correspondent Chuck Thompson.

Mary, a Clerk in the Central Area office, and David were married on May 22 in Thunder Bay.

Congratulations, David and Mary, from everyone at the Central Area office!.

Mary and David Horne about to receive their wedding certificate.

GRAFTON

Correspondent: George Crumback

Grafton Notebook

Summer students

Stn. 136, Grafton, welcomes seven summer students to the station and wishes them a very pleasant summer on the line. The students, who attend university, college or high school include: **Jennifer Davis** (University of Toronto), **Gerald Lawson** (Brock University), **Paul Najnar** (Thornley Secondary High School, Thornhill), **Michael Martin** (Carleton University), **Dave McGlennon** (Queens University), **Ian McPhee** (Collegiate West, Cobourg) and **Cindy Rutherford** (Durham Community College).

The students joined the station in May and June and will work until school starts again in September. The services they will be providing include general station clean-up, painting the meter station, cutting grass, Right-of-Way maintenance and secretarial services.

Their assistance will certainly come in handy and is very much appreciated.

Congratulations

Congratulations to **Wally Hirst**, Technician E, and **Greg Simmons**, Utility, for passing the recent 'Phase II Electronics' course held at Seneca College in Toronto. (See Eastern Area article, "Electronics Hot in Eastern Area" for further details about the school).

BBQ and party

The annual Mainliner Club barbecue and party was held for Stn. 136, Grafton, employees and their families on June 26 on the station's beautiful landscaped grounds.

Afternoon activities included golf (8 hole course), baseball, card games and of course good food and conversation.

There were 33 people who attended the event as well as special visitors including: **Louis Lessard,** Stn. 142 District Manager, and his wife, **Helen, Dr. Gavin Couper,** Eastern Area Manager, and his wife, **Hazel**, and their three young sons, as well as **Jack McLean,** "our youngest retiree" and his wife **Margaret.**

This Mainliner Club social event continues to be very popular at Stn. 136.

Children's summer picnic

The annual Mainliner Club's Children's Picnic was held on June 12 at a KOA trailer park, approximately eight km. from Stn. 136, and by all accounts the event was a lot of fun for everyone involved.

The 11 children who attended the picnic were kept busy throughout the afternoon swimming and competing in various leg races.

A special thank you to **Otis Best**, Utility, for his assistance to the Mainliner Club Executive in organizing this event.

GRENFELL

Correspondent: Orest Nawrocki

From left to right, Barb Loverage, Walter Hahn and Spence Hardy clean the plant at Stn. 21 after a Fire-Foam test.

'A' Plant gets bubble bath

Question: What takes 20 minutes to fill a compressor station but takes a whole day to clean up?

Answer: "Fire-Foam", according to Correspondent Orest Nawrocki.

Employees at Stn. 21, Grenfell were treated to a demonstration of how this wonder foam works, when the station held its annual fire-foam test in 'A' plant in May.

"The foam is a very high detergent soap," said Orest. "So it works like a big bubble bath."

"It also works wonders on cutting grease and grime," he added. "But I wouldn't recommend it as being a very efficient way of doing a general cleaning."

The foam is triggered in the plant either by fire, heat or in the case of a demonstration, by manual push-button. Within 20 minutes all the equipment is completely smothered in foam and it is almost impossible to see anything other than the dream-whip like substance. "It's a real experience," said Orest.

To clear out the foam, the men simply open the plant door and let the wind carry the big balls of foam across the yard. On a calm day the men may also use large sheets of cardboard to push the foam out the door. The most time consuming part of the clean up is having to hose down the plant and the equipment with water.

"The clean up, a real change from the usual work at the station, was done in very good spirits," reports Orest.

The annual test is done in keeping with TransCanada's COOPS (Code of Operating Practice) procedures for station security and protection. Hopefully, however, the foam will never have to be tested in the area for which it is intended - fire prevention.

EASTERN AREA

Correspondent: Don Haworth

Out of the pan and into the fire

Firefighting Drill at Stn. 136

A firefighting school was held at Stn. 136, Grafton, recently as part of TransCanada's ongoing commitment to teach field employees the latest methods of firefighting.

Sub-District Manager **George Crumback** was the instructor for the theory side of firefighting, while Supervisors **Don Bonnah** and **Ed McGrath** handled the practical side of firefighting instruction.

Sub-District Manager, George Crumback instructs Eastern Area employees on the theory of firefighting.

An employee at firefighting school moves in to extinguish a fully-developed pan-fire.

Instructor Don Bonnah demonstrates how to extinguish a pan-fire.

EASTERN AREA

Correspondent: Keith Moore

Electronics Hot in Eastern Area

Electronics was a hot topic in the Eastern Area after 16 employees, from Stns. 102, Potter, to 802, Candiac, participated in a three-week Phase II Electronics course held at Seneca College in Toronto in June.

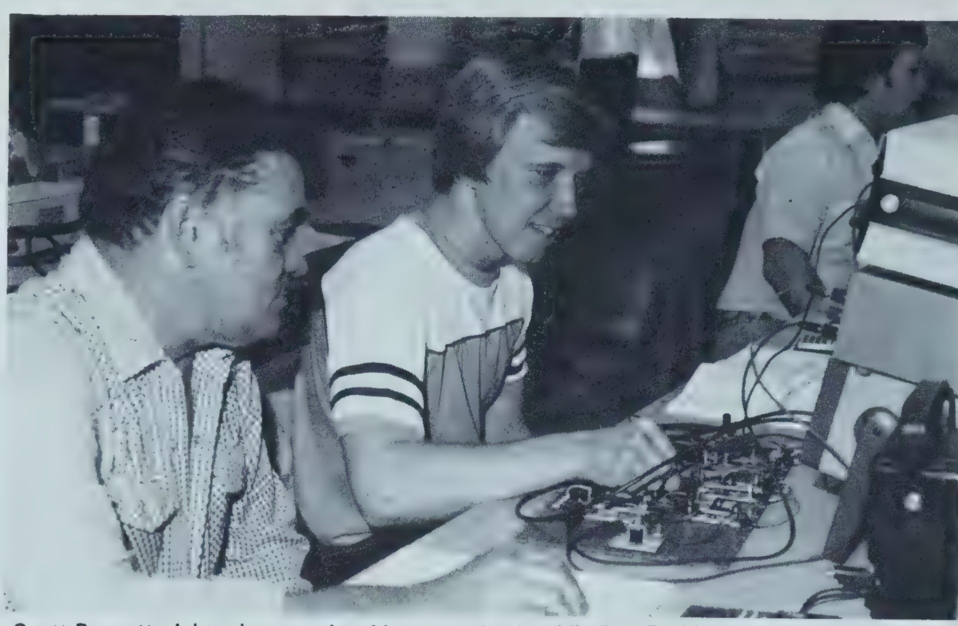
This was the first electronics school held in the Eastern Area and was initiated as part of the company's recently implemented Training and Development program.

The course covered the basics of math, electricity and semi-conductor design and application. It was open to all employees who passed a basic knowledge exam.

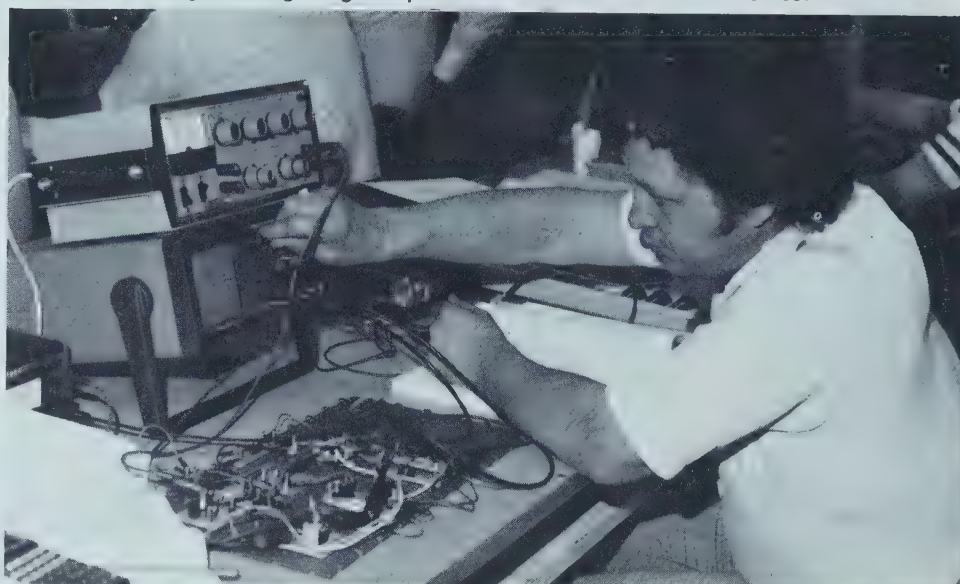
At the end of the school, employees were required to write a 3-1/2 hour exam to test their knowledge and to qualify them for the Phase III Digital Technology course, to be held in 1983.

"The course was challenging and rewarding for all who attended — from Maintenance men to District Technicians," reports Correspondent Keith Moore, who attended the school. He added that these courses are terrific for employees "who want to get ahead."

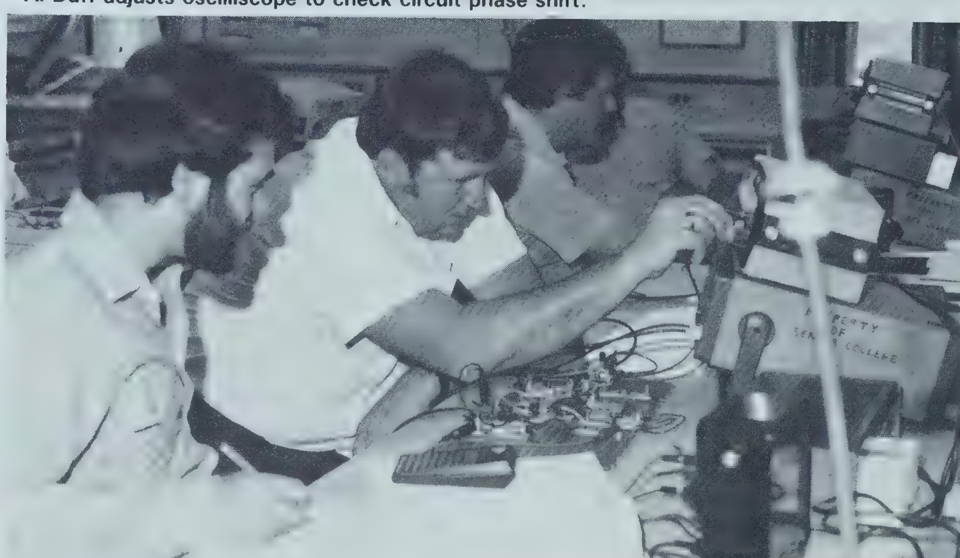
Next year the company will also offer employees an opportunity to attend a Phase I Electronics course.



Scott Bennett, right, changes signal input to circuit while Don Dodd observes.



Al Duff adjusts oscilliscope to check circuit phase shift.



Mike Labbe, foreground, notes results of the circuit performance test while Larry Quinton modifies the circuit components. In the background, Ron Waters works on a similar experiment with his partner.

TORONTO

Picnic at Petticoat Creek

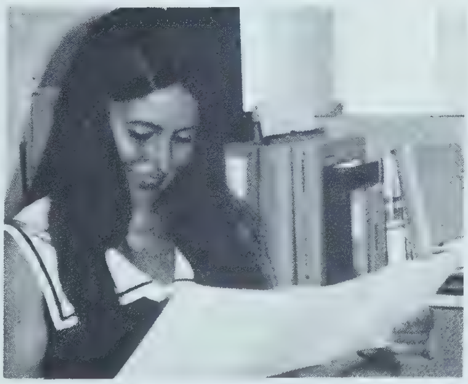
A beautiful sunny day provided the ideal setting for the Toronto Mainliner Club's Annual Childrens Picnic, held at Petticoat Creek in Pickering.

Adults and children alike were kept busy with races, egg-toss and tug-of-war contests.

An all-out effort is required in the tug-of-war contest.

The toddlers put their moms through their paces.

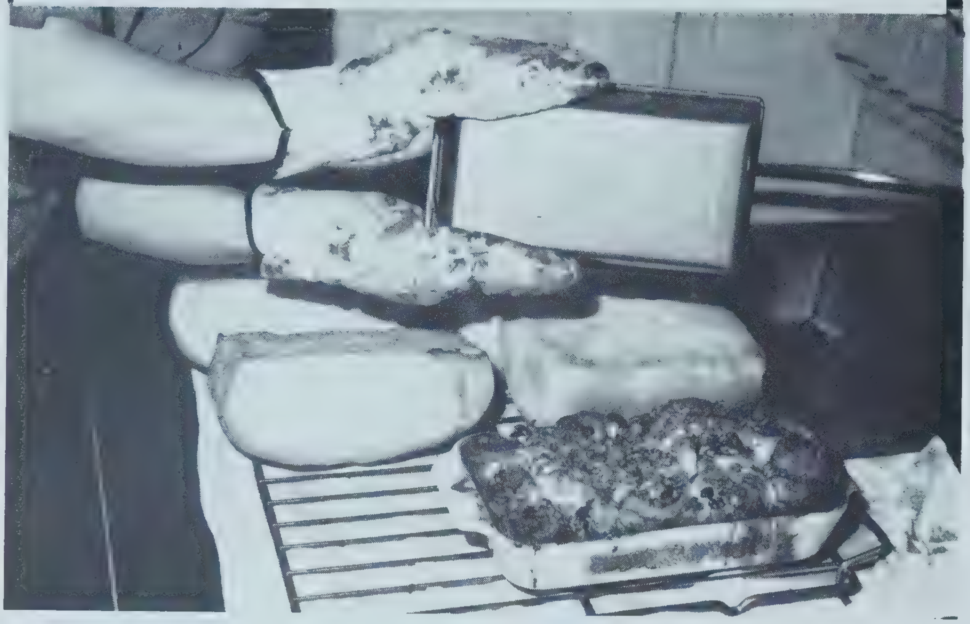
Linda Glendinning enjoys a relaxing moment at the Annual Mainliner Club picnic.



Bev Leslie, formerly Bev Brush, reads the humorous card she received along with a pre-wedding gift, from her co-workers in the Pipeline Supervision area. Bev was presented with two oil lamps in honor of her recent marriage to Larry Leslie. Bev works as a Senior Secretary and is a former Toronto Mainliner Club Social Director.

Artist Shirley deLang, center, shows one of her commissioned paintings to Betty Saunders of Office Services and Harry Rankin of Graphics. A former Toronto office Receptionist, Shirley had a two-week exhibit of her latest oil paintings held recently at Toronto's Royal Trust Tower, adjacent to Commerce Court.

RECIPE



There's nothing like the sweet smell of freshly baked bread and chelsea buns hot from the oven.

GREAT GRAMPA BROWN'S BREAD & CHELSEA BUN RECIPE

Charlie Brown gives his wife, Ginny, a hand making chelsea buns.

This wholesome bread and chelsea bun recipe comes to us compliments of Ginny Brown, wife of Charlie Brown, a Utility employee at Stn. 123, Bracebridge.

This very special family recipe originated with Charlie's great grandfather and has been handed down to members of the Brown clan ever since. To remain true to the spirit and method of preparing this recipe, Ginny continues to use antique utensils and makes approximate measurements of the ingredients.

Bracebridge Correspondent Keith Moore spent a day observing the Browns making bread and buns recently and capturing it on film for 'Along The Line'. Naturally, he also stayed to sample the results.

"I sampled all of the freshly baked goods," reports Keith. "And found it all delicious. I urge anyone looking for a great chelsea bun recipe to get cracking and start baking."

It's also a surefire way to get your hands on a lot of dough, quick!

Great Grampa Brown's Bread & Chelsea Buns

Ingredients:

9 tablespoons (135 ml) sugar
2 tablespoons (30 ml) yeast
4 tablespoons (60 ml) lard or shortening
1 tablespoon (15 ml) salt
2 kilograms (approx. 1 lb.) of white flour

Preparation time: 6 to 8 hours
Cooking time: approx. 15 mins. for bread and 45 mins. to 1 hour for chelsea buns.

Makes: 7 to 9 loaves of bread, or 7 loaves of bread and 1 pan of dinner rolls and chelsea buns.

Preparation: (for bread)

A
1. In a large, warm cup or glass put ¾ cup of warm water.
2. Add 2 teaspoons of sugar and stir until dissolved.
3. Carefully sprinkle 2 tablespoons of yeast on top.
4. Set mixture to the side.

B
1. In a large bowl, mix 2½ dippers (approx. 10 cups) of hot water,
   4 tablespoons of lard or shortening, l tablespoon of salt and 8 tablespoons of sugar, until lard has dissolved.
2. Add flour (approx. 2 kg), sprinkling one cup at a time into the mixture and stir. Continue adding flour until the mixture is hard to stir.
3. Add yeast mixture.
4. Stir and add remaining flour a bit at a time until mixture is not too sticky.
5. Place mixture on flat surface. Work until no longer sticky and knead out air bubbles.
6. Form into smooth ball.
7. Scrape bowl clean, place ball in bowl and cover with a towel. Leave contents to rise (2 to 3 times larger) for approximately 1½ hours.
8. When mixture has risen, punch it down. Cover and allow to rise again.
9. When dough has risen for the second time cut it and place in a greased pan and allow to rise a third time.
10. Preheat oven to 350 degrees and bake for about 45 minutes to one hour.

CHELSEA BUNS:

To make chelsea buns just roll out the dough until it is as thin as a pizza crust. Spread melted butter across entire surface and sprinkle on brown sugar, cinnamon and raisins. Roll the dough and cut to desired size. Place in baking pan and spread on glaze (mixture of brown sugar and milk). Let dough rise till twice its size. Then place in pre-heated oven (350 degrees) and bake for 20 to 30 mins.

people

Hello To:

Antonacci, G.M.(Miss), Facilities Planning, Toronto
Barrett, D.E.(Miss), Information Systems, Toronto
Boyle, P.J., Field Transmission, Nipigon
Bye, R.C., Field Transmission, Nipigon
Carlson, L.W., Field Transmission, Shaunavon
Cetiner, Mahmut, Quality Control, Toronto
Chan, E.C., Corporate Financial Planning, Toronto
Chan, J.Y (Mrs.), Corporate Financial Planning, Toronto
Chosen, C.A. (Miss), Corporate Accounting & Control, Toronto
Dickson, T.A., Facilities Planning, Toronto
Feagan-Sutton, L.M. (Mrs.), Administration Corporate, Toronto
Finnegan, P.A.(Miss), Right-of-Way/Environmental Affairs, Toronto
Fry, M.J., Deliverability, Calgary
Gratrix, E.A., Personnel & Office Services, Calgary
Hodgson, L.M.(Miss), Toronto Information Systems, Toronto
Jones, M.A.I., Deliverability, Calgary
Kovacic, Vera,(Mrs.), Information Systems, Toronto
Lemieux, O.P., Field Transmission, Mattice
Levac, C.H., Field Transmission, Eastern Area Office
Leyva, Lorna,(Miss), Printing, Toronto
Mahoney, J.C., Corporate Financial Planning, Toronto
Pesant, W.R., Sales, Toronto
Pilley, F.C., Operations, Calgary
Ratana-Rueangsri, Rueangratana, Field Transmission, Geraldton
Sim, C.A.(Mrs.), Printing, Toronto
Stauber, L.V. (Miss), Accounting, Calgary
Thrower, B.M.J. (Mrs.), Aviation, Malton
Tideman, G.M. (Mrs.), Systems and Data Processing, Toronto
Timoruski, T.A., Field Transmission, Grenfell
Webber, R.G., Toronto Information Systems, Toronto

Changes - May

Alleyne, A.C., Internal Consultant to Supervisor, Development Services, Calgary Information Systems, Calgary
Angus, J. (Miss), Programmer to Programmer Analyst, Calgary Information Systems, Calgary
Aubrey, G.B., Data Base Administrator to Supervisor, Data Base Services, Calgary Information Systems, Calgary
Bennett, F., Gas Measurement Technician to Measurement Inspector, Operations, Calgary
Besplug, M.F., Technician 'E', Burstall to Sub-District Supervisor, Eng/Ops, Shaunavon
Braun, T., Messenger to Assistant Aircraft Engineer, Aviation, Toronto
Chen, K.(Mrs.), E.D.P. Audit Assistant to Senior E.D.P. Auditor, Internal Audit, Toronto
Demanis, R.L., Cost Analyst, Eng/Ops Administration and Planning to Senior Accountant, Plant Accounting, Toronto
Ewington, P.A., Engineering Designer to Engineer II, Eng/Ops Compression, Toronto
Farbar, G.G., Engineer I, Eng/Ops Administration and Planning to Senior Planning Analyst, TransCanada Alaska Pipeline Systems, Toronto
Hammond, D.S., Supervisor, Right-of-Way, Right of Way and Environmental Affairs, Toronto to Eastern Area
Hare, M.O. (Mrs.), Junior Administration Assistant to Environmental Assistant, Right-of-Way and Environmental Affairs, Toronto
Heffer, L. (Mrs.), Programmer to Programmer Analyst, Calgary Information Systems, Calgary
Hickey, A.C., Assistant Manager to Manager, Corporate Accounting and Control, Toronto
Jensen, H.D., Senior Audit Analyst to Supervisor, Internal Audit, Calgary
Law, E., Programmer to Programmer Analyst, Calgary Information Systems, Calgary
Lee, M.M.(Mrs.), Junior Word Processing Operator, Printing to Toronto Information Systems, Toronto
Lewis, R.T., Assistant Technician to Measurement Inspector, Operations, Calgary
MacRae, I., Senior Clerk to Assistant Contract Analyst, Sales, Toronto
McDonald, S.(Mrs.), Secretary II to Senior Secretary, Corporate Financial Planning, Toronto
McRae, R.G., Sub-District Supervisor, Herbert to Sub-District Manager, Eng/Ops, Shaunavon
Meister, M.H.(Miss), Secretary I, Right-of-Way and Environmental Affairs to Internal Audit, Toronto
Miller, J.D., Programmer to Programmer Analyst, Calgary Information Systems, Calgary
Mitenbergs, K.A.(Miss), Audit Clerk to Interal Auditor I, Internal Audit, Toronto
Ofremchuk, T.O., Assistant Manager to Manager, General Accounting, TCPL Resources, Calgary
Park, D.C., Temporary Maintenance to Maintenance, Eng/Ops, Falcon Lake
Rourke,K.P., Assistant Technician to Measurement Inspector, Operations, Calgary
Salmon, J.D., Technician, Thunder Bay to Sub-District Supervisor, Eng/Ops, Shaunavon
Spencer, L.(Miss), Senior Secretary to Executive Secretary, Corporate Accounting and Control, Toronto
St. Martin, P.J., Right of Way Agent to Senior Right of Way Agent, Right-of-Way and Environmental Affairs, Central Area
Stillinger, A.(Miss), Clerk to Engineering Technician A, Deliverability, Calgary
Terroux, M., Supervisor, Programming to Supervisor, Technical Services, Calgary Information Systems, Calgary
Watt, W.H., Environmental Analyst to Environmental Co-ordinator, Right-of-Way and Environmental Affairs, Toronto

Changes - June

Boros, E.(Mrs.), Senior Clerk to Junior Administration Assistant, Eng/Ops Administration and Planning, Toronto
Butchereit, R., Draftsperson 'A' to Senior Draftsperson, Eng/Ops Compression, Toronto
Devries, J., Utility, Eng/Ops, Smooth Rock Falls to Shaunavon
Fisher, G. L., Engineer I to Engineer II, Eng/Ops Compression, Toronto
Fox, L. D., Temporary Maintenance, Caron to Maintenance, Eng/Ops, Herbert Gordon, T., Maintenance to Utility, Eng/Ops, Geraldton
Iannone, N., Supervisor, Short Term Financial Planning, Corporate Financial Planning to Supervisor, Budgets and Forecasts - Pipeline Division, Toronto
Ludke, L. K., Maintenance to Utility, Eng/Ops, Caron
Mathies, H. C., Utility, Eng/Ops, Herbert to Shaunavon
Nazar, B. M., Maintenance to Utility, Eng/Ops, Kenora
Sawinski, L., Assistant Gas Controller to Gas Controller, Eng/Ops Compression, Toronto
Skuce, R. J., Utility, Eng/Ops, Moosomin to Shaunavon

Marriages

Bezeau, D.J, Field Transmission, Hearst, June 12
Bhola (nee Barran) A.S., Operations, Calgary, May 1
Cathcart, R.G., Plant Accounting, Toronto, June 12
Chan, S.H., Eng/Ops, Caron, May 15
Griffiths, M.H., Office Services, Toronto, May 15
Horne (nee Armenti) M.F., Eng/Ops, Central Area, May 22
Jewitt, K.R., Gas Control, Toronto, June 12
Kelbert (nee Hague), J.A., Information Systems, Toronto, June 5
Levitt (nee Cox), Hazel, Drafting, Toronto, June 4
Mazur (nee Timoski) D.E., Personnel, Toronto, May 29
McBride, K.A., Gas Measurement, Toronto, June 19
Montemurro, D.M., Construction, Central Area, May 15
Pallister, K.G., Compressor Facilities, Toronto, July 3
Prystanski, M.D., Construction, North Bay, June 19
Robertson, F.S., Field Transmission, Ancaster, May 22
Skutnik (nee Cook) L.L., Deliverability, Calgary, April 11
Wood, R.L., Construction, Eastern Area April 16

Births

Bricker, W.A., Deliverability, Calgary, Boy, Mark Aaron, May 26
Dunlop, C.B., Regina, Boy, Jason Scott, March 16
Gudmundssow, G.K., Field Transmission, Moosomin, Girl, Helga Kristin, May 4
Ladas, George, Eng/Ops, Toronto, Girl, Deirdre Leslie, March 23
Lewis, R.T., Gas Supply, Calgary, Girl, Christine Joanne, April 27
Madder, W.J., Aviation, Toronto, Girl, Kristin Heather, March 16
McLean, F.P., Eng/Ops, Maple, Girl, Jennifer Emily McLean, May 15
Murray, J.M., Legal, Toronto, Boy, Jeremy Matthew James, May 18
Newman, J.B., Eng/Ops, Martin, Girl, Amanda Gayle, May 7
Ofremchuk, T.C., TCPL Resources, Calgary, Girl, Melissa Danielle April 27
Taylor, C.J., Energy Studies, Toronto, Girl, Kelsey Helen, May 12
Temple, Allan, Eng/Ops, Burstall, Girl, Lynn Margaret, March 31
Turchet, Janet, Personnel, Toronto, Girl, Lauren Kimberley, May 21
Viau, Omer, Field Transmission, Smooth Rock Falls, Boy, Michel Andre, March 4
Wagner, Robert, Field Transmission, Burstall, Girl, Natasha Joy Marie, March 29

Terminations - May

Carmichael, K.A., Eng/Ops, Portage La Prairie
Chan, D.H.(Mrs.), Polar Gas Project, Toronto
Gingell, G.T., Eng/Ops Administration & Planning, Toronto
Kuziw, A.(Miss), Accounting and Financial Studies, Calgary
Tsang, L., Toronto Information Systems, Toronto

Terminations - June

Arculus, S.(Mrs.), Printing, Toronto
Buser, J.(Mrs.), Public Affairs, Toronto
Duggan, L. A., Polar Gas Project, Toronto
Johnson, D. V., Eng/Ops, Ile des Chenes
Shukster, D.(Mrs.), Eng/Ops Pipeline, Toronto

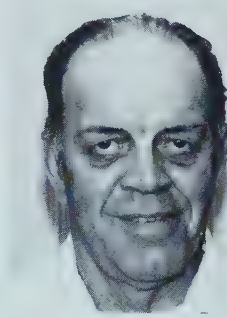
Retirements - May

Metcalfe, G.L., Operations, Calgary

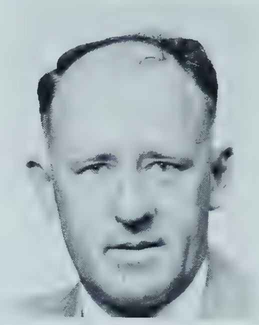
Retirements - June

Ruoho, A. G., Eng/Ops, Nipigon
Watkins, E. J., Personnel & Office Administration, Calgary

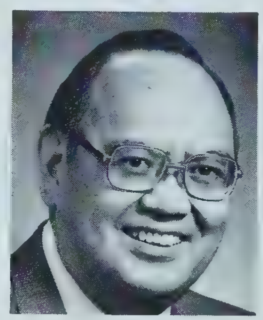
SERVICE AWARDS 25 years



George Stowe
Sub-Dist. Manager
Moosomin
April 25



Alen Hansen
Aviation
Winnipeg
June 13



Ed Foo
Gas Supply Stats
Calgary
June 1

Charlie Taylor
Contracts, Op & Testing
Calgary
June 13

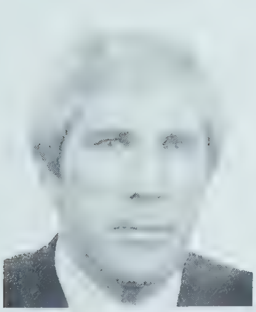
Ida Hammermeister
Landperson I
Calgary
June 1

Gerry Schwarz
Eng/Ops
Toronto
June 17

Bill Dillon
Printing
Toronto
June 17

Pete Artemchuk
Eng/Ops
Victoria Square
June 24

Chuck Ratai
R/W Agent
Eastern Area
June 25



Harvey Fyke
Eng/Ops
Portage la Prairie
June 27

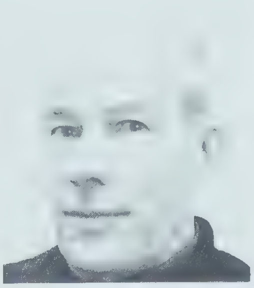
15 years

Arvo Ruoho
Eng/Ops
Nipigon
June 1

Dave Cann
Eng/Ops
Maple
June 1

Jack Lemoine
Eng/Ops
Moosomin
June 1

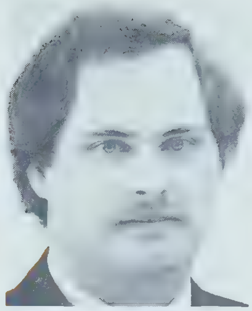
Bill Williams
Payroll
Toronto
June 19



Tony Fillion
Utility
Mattice
June 1

Harry Patterson
Eng. Administration
Toronto
June 19

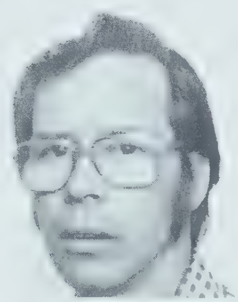
5 years



Ed Hankins
Gen. Accounting
Toronto
June 20

Donato Cafarelli
Dan Cafarelli
Eng/Ops
Maple
June 6

Kimberly Sinclair
Coding & Payables
Toronto
June 21



Ken Hamman
Eng/Ops
Kenora
June 17

Murray Young
Polar Gas
Toronto
June 27

GREAT LAKES

5 Years

Ramona Heintz
Farwell, MI
June

25 Years
Raymond Steppe
Bemidji, MN
June

along the line

Along the Line

Volume No. 26
No. 1, 1982

Correspondents

Burstall - Collette Hegg
Cabri - Roy Thomas
Herbert - Gary Gould
Caron - Barry Huenison, Stan Boyko
Regina - Georgina Phillips
Grenfell - Orest Nawrocki
Moosomin - Bernadette Nosterud
Rapid City - Carol McLaughlin
Portage La Prairie - Harvey Fyke, Philip Lemieux
Ile des Chenes - Rhonda Booth
Falcon Lake - Gord Elder
Kenora - Kim McCaig
Dryden - Lloyd McFadden
Ignace - Randy Dean
Upsala - Rose Mutton
Thunder Bay - Chuck Thompson
Nipigon - Eini Rathje
Geraldton - Aksel Johnson
Hearst - Anna Vanderlip
Mattice - Ronald Begin, Phyllis Erickson
Smooth Rock Falls - John de Vries
Ramore - Cleo Hebert
Haileybury - Keith Ryan, Art Seed
North Bay - Joe Williams
Bracebridge - Keith Moore
Maple - Dave Cann, Richard Sampson
Ancaster - Aubrey Marshall
Grafton - George Crumback
Kingston - Gary Peck
Candiac - Gerry Dion
Toronto - Bill Moore
Aviation, Malton - Terry Redfern
TQM - Lyse Cartier

Front Cover - Who says there's no beauty in a Canadian winter? This "winter wonderland" painting by Graphic Artist Harry Rankin, beckons all who are interested in hiking, cross-country skiing and winter's enchantments.

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Publications Supervisor:
C. B. Tucker
Assistant Editor:
Martine Becu

Year-end report shows net income for 1981 increased by 31 per cent

TransCanada announced on January 20 an increase of 31 per cent in net income per common share for 1981. For the last quarter of 1981 net income per common share increased by 60 per cent when compared to the same quarter last year.

In his year-end report to shareholders, President and Chief Executive Officer Rad Latimer noted earnings per common share were $2.85 per share compared to $2.18 last year. Earnings per share for the final quarter were 96 cents compared to 60 cents in 1980.

Net income applicable to common shares for 1981 was $125,573,000 compared to $93,435,000 in 1980. Funds from operations increased by 11 per cent to $6.26 from $5.64 per share in 1980.

Mr. Latimer noted that TransCanada took "another large step in its diversification program" in December of 1981 when it agreed to purchase, subject to certain conditions, a 12.5 per cent undivided interest in substantially all assets of Hudson's Bay Oil and Gas Company Limited (HBOG). Purchased from Dome Petroleum Limited for about $555 million, the assets include a share of all Canadian and offshore properties of HBOG

"With this acquisition, TransCanada becomes one of the top 15 oil and gas companies in western Canada," Mr. Latimer said.

The report notes that in December, Trans Quebec & Maritimes Pipeline, TransCanada's 50 per cent owned affiliate, was authorized to extend natural gas transmission facilities beyond Quebec City to eastern Canadian markets in New Brunswick and Nova Scotia.

The company's new $450-million pipeline linking North Bay and Morrisburg, Ontario, will be in service late in 1982. The line, approved by the federal government in January "is needed to provide gas to growing eastern Canadian markets.

"The National Energy Board (NEB) has set hearing dates for two matters of major interest to TransCanada," Mr. Latimer said. "The company's 1982 facilities application, which includes more than 200 kilometres of additional pipeline facilities, will be heard by the Board beginning February 16.

"The NEB's Gas Export Omnibus Hearing will begin March 16. The first phase of this hearing will review the procedure for determining Canada's natural gas surplus available for export. Subsequent phases will consider applications for new exports of natural gas, including those of TransCanada which total more than 10 billion cubic metres annually.

"Approval of significant additional exports would provide sizable economic benefits to the Canadian economy," said Latimer.

Mr. Latimer noted that TransCanada recently completed acquisition of a 44 per cent interest in the Saskatchewan section of the Alaska Natural Gas Transportation System (ANGTS) for approximately $27.5 million. This section connects the system's Alberta facilities to Northern Border Pipeline facilities.

"Northern Border, in which TransCanada has a 30 per cent interest, will be in operation later this year and will initially carry Canadian natural gas to United States markets," Mr. Latimer noted.

Robert Hodgins, Supervisor, Corporate Taxation, says "the majority of our tax planning is complete before you even start preparing the return."

PREPARING YOUR 1981 INCOME TAX RETURN

By: Robert Hodgins, C.A. Supervisor, Corporate Taxation

My objective in writing this article is to assist you in the completion of your 1981 Income Tax Return.

GENERAL COMMENTS

- It is my opinion that every employee of TransCanada can prepare and complete their own return if sufficient time is spent. The tax return preparation is just the mechanical reporting of the year's events. The tax planning has to a great extent already been determined by your actions in the previous year.
- Don't give up in frustration because of the perceived complexity of the 1981 forms and schedules. Many of the schedules are only used in complex situations.
- Read and refer to "Your 1981 Tax Guide" and remember if necessary, the District Taxation Office will provide you with some assistance. The telephone numbers for the offices are found on the back pages of your guide.
- Once you have prepared the return in rough, complete a copy in final form. Keep the rough copy along with copies of all information slips for your records. You should retain a copy of everything you are sending to Revenue Canada.
- File your tax return by April 30, 1982. I would suggest that you complete the preparation of the return in advance of April 30 to avoid errors caused by panic preparation.

STEP 1 GET READY

Gather together all the information you will need to prepare the return. These include T4 and T5 slips, interest and family allowance slips. If you are missing slips but are sure of the amounts, you can prepare your return but only file the return once all slips are received. At the latest file by April 30, 1982 regardless of missing slips.

A properly completed return can usually be processed in 8 weeks. If slips are missing, the return will be pulled from the mainstream processing and as a result it will take much longer to obtain a refund.

STEP 2 IDENTIFY YOURSELF

Since many of the return items are checked between spouses, it is becoming increasingly important to ensure you and your spouse's Social Insurance Number are shown correctly. Also make sure the preprinted address label is correct so your tax correspondence and refunds will come to the correct address.

STEP 3 LIST YOUR INCOME

Employment Earnings

On page 1, line 1 of your return, report your employment earnings. This amount is shown in Box (C) of your T4 slip. The amount in Box (C) already includes the taxable allowances and benefits reported in Box (K).

The Taxable Allowance and Benefits are some of the amounts paid by the company on your behalf. Such items include Provincial Health Insurance Premiums, the taxable portion of the Employee Savings Plan and Group Life Term Insurance coverages in excess of $25,000.

In arriving at "net employment earning" page 1, line 8 - don't forget to claim the employment expense of up to $500. Refer to guide item 4 if an explanation of the employment expense is needed.

Other Sources of Income

Additional sources of income are reported on lines 9 to 23. These items include taxable Family Allowance payments, taxable amount of dividends from taxable Canadian corporations use and attach schedule 4), taxable capital gains or allowable capital losses (use and attach schedule 2).

Only include the Family Allowance payments for the children you claim as dependants. Remember even though the family allowance is paid to the wife, either spouse can claim the family allowance as income as long as he/she is the spouse claiming the children as dependants.

Taxable dividends are the amounts reported on line B of your T5 slips. These amounts are higher than the

Robert Hodgins, Supervisor, Corporate Taxation, says employees should read and refer to their 1981 tax guides when preparing their income tax returns.

amounts actually received but as an offset to this additional income is a federal dividend tax credit. The use of the dividend tax credit will be discussed in the computation of taxes payable.

Capital Gains And Losses

If you disposed of capital property in 1981 you will have to include in income one-half of any capital gains to the extent they exceed one half of the capital losses. Capital property for most taxpayers would include shares, bonds and rental properties. To the extent that the one-half of the capital losses exceed one-half of the capital gains in 1981, you must reduce your other income by the lesser of $2,000 or the allowable capital loss (see schedule 2 and guide item 16). If the allowable capital loss exceeds $2,000, the excess may reduce taxable capital gains and other income in 1980 (see guide item 16H). As you can see, there are substantial tax planning possibilities depending on when you dispose of your capital property, i.e., trigger a loss at year end to offset a capital gain already realized.

STEP 4 CLAIM YOUR DEDUCTIONS

Arriving At Net Income

You are able to deduct in arriving at net income (page 2, line 41) and taxable income (page 2, line 62) certain amounts outlined below. The distinction between net income and taxable income will become important when we are looking at claims for dependants. Some of the deductions allowed are as follows:

- Canada Pension Plan and Unemployment Insurance Premiums paid by the employee are deductible (amounts are set out on the T4 in boxes D and E respectively);
- Registered Pension Plan Contributions - Claim up to a limit of $3,500 (amount is shown on the T4 slip in box (F));
- Registered Retirement Savings Plan Premiums - Claim on page 2 line 33 the amount shown on your official receipts issued by the institution where you made such contributions. Be aware of maximum contributions allowed, i.e., $3,500 or 20% of earned income where a member of company pension plan less the amounts shown in box F on your T4 or $5,500 or 20 per cent earned income in the case of an employee not being a member of the company plan (guide item 21 and 33 describe the restrictions);
- Child Care Expenses - These amounts are generally deductible against a working mother's income. In some cases, fathers may deduct such amounts. Surprisingly, limited amounts paid to a boarding school or camp are allowable as child care expenses (see guide item 26 and schedule 5);
- Other Deluctions - Such amounts include interest on money borrowed to earn investment income. Interest on R.R.S.P. loans taken out prior to November 12, 1981 will be currently deductible against other sources of income.

At this point, we have arrived at the calculation of net income.

Arriving At Taxable Income

Each taxpayer should claim a basic exemption of $3,170. In addition there are exemptions available for supporting your spouse and your wholly dependent children depending on their net income (calculated as above). In the situation where you are single, divorced, separated or widow(er) and supported a relative in 1981, you may be entitled to additinal claims (see schedule 6 and guide items 33 and 34 for details).

Medical and Charitable Deduction

A taxpayer can claim a standard deduction for medical expenses and donations of $100. The alternative is to claim the portion of his actual medical expenditures not reimbursed by health insurance plans (schedule 9 should be used to list these medical expenses) reduced by 3 per cent of net income to arrive at the allowable portion of medical expenses. To this allowable portion of medical expenses should be added the charitable donations to the extent they are supported by actual receipts.

Interest Dividends and Capital Gains Deduction

For those individuals having capital gains, interest income or dividends, there is a deduction which will offset up to $1,000 of this income. Section E of schedule 4 should be used to calcuate the amount of this income eligible for this deduction.

Education Deduction

Where a taxpayer is supporting a dependent who is in full time attendance at an educational institution, an education deduction claim is available in some instances. Many taxpayers fail to calculate and claim this amount (see guide item 43 for details on this calcuation).

Transfer of Deduction from Spouse

Another area where many taxpayers fail to calcuate and take advantage of, is the "eligible deductions transferred from spouse". Such transferable items include the unused portion of the interest, pension, disability and education deduction. Schedule 3 of the tax schedule helps to calculate these amounts. It is also worthwhile reading guide item 44 and running through schedule 3 to see if such additional deductions are available to you.

We have now arrived at taxable income which is shown on line 62 of the return. There are two methods to calculate taxes payable. The first and more simple approach of the two is to use the tax tables but there are only limited circumstances in which these tables can be used. The situations in which the tables can be used are outlined at the beginning of the tables. If you cannot use the tables because you do not qualify then you must complete the detailed tax calcualtion (schedule 1). In completing the detailed tax calcualtion do not forget to claim the dividend tax credit, if you have included in income, dividends from Canadian sources.

It will also be worthwhile taking a look at the Child Tax Credit form (schedule 10) to make sure you are not missing a tax credit which is available to you.

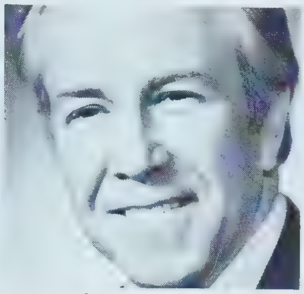
CLOSING COMMENTS

The first time you complete your return will be the most difficult and from that point on it should become easier. As you can appreciate after completing the return, the majority of tax planning is complete before you even start preparing the return. With this in mind, my suggestion is to start your 1982 tax planning long before December of 1982.

Appointments

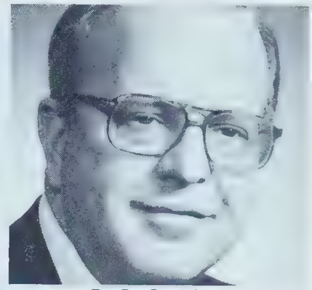
TransCanada's Board of Directors approved the following appointments on January 20.

R. D. Walker was appointed Senior Vice President, Marketing and Administration with expanded overall responsibilities to include the Controller's function in addition to the Marketing and Rates function. Mr. Walker will continue to report to G. W. Woods, Vice Chairman and Chief Operating Officer.



R. D. Walker

B. M. Escoffery



R. S. Smith

B. M. Escoffery was appointed Vice President, Marketing with direct responsibility for Marketing in addition to Rates. In addition to Steve Jakymiw, B. E. Hulse and A. A. Duloff will now report to Mr. Escoffery. Mr. Escoffery will continue to report to Mr. Walker.

R. S. Smith was appointed Vice President and Controller - Pipeline Division. Mr. Smith will continue to have responsibility for the Accounting, Budgeting, Insurance and Property Taxation, Office Services and Printing Departments. Mr. Smith will report to Mr. Walker.

For Zenn Mazonas coming to work for TransCanada proved a lifetime occupation

Although Squad Leader Zenn Mazonas officially retired on November 30, 1981, he is still coming into work each day - and getting paid. Only this time, he's working as a consultant on material standards.

Born in Kaunas, Lithuania, Zenn worked as a Design Engineer before moving to Canada in 1948. He worked for Ontario Hydro in Northern Ontario, moving to Toronto in 1949.

Having worked as a Draftsman with several consulting engineering firms, Zenn joined TransCanada in March, 1958, at the then King Street Toronto office. He started by designing the first compressor stations on the company system, which included: Station 2, Burstall; Station 13, Caron; Station 25, Moosomin; Station 41, Ile des Chenes and Station 68, Thunder Bay.

When Zenn joined TransCanada in 1958, the design and construction work was progressing simultaneously.

At his retirement party, Squad Leader Zenn Mazonas said that new employees of TransCanada have great opportunities ahead.

Zenn progressed on the job from Draftsman, Checker, Senior Draftsman to Squad Leader.

Zenn said that when he first moved to Canada and worked for consulting engineering firms, he went from job to job. He found it hard to believe when he was told that "a job at TransCanada could be a lifetime occupation."

The job indeed proved a lifetime occupation for Zenn. What he said that he couldn't possibly conceive of at that time, was the fantastic growth that lay ahead for TransCanada PipeLines.

"The same opportunities are available today to new employees of TransCanada," Zenn predicts. "The company will continue to enjoy tremendous growth for many years."

Travel is high on the list of hobbies for both Zenn and his wife Jane. They've travelled to Mexico twice, Hawaii, St. Lucia, Barbados and Florida. Also, a visit to Lithuania in 1978, was followed by a trip to the Soviet Union to see Moscow. On the return trip, they visited Yugoslavia.

Zenn has a son, Romas, a Pharmacist in Guelph, Ontario. There's also two grandchildren, Sabrina, 9 and Larissa, 11.

At a well-attended retirement party, held at the downtown Holiday Inn presentations were made by Guy Cataford, Manager, Compression Facilities and R. J. Reid, Vice President, Engineering and Operations. In addition to a cheque from the company, Zenn received an electric shaver and a small electric outboard motor for his fishing boat. Zenn spends most weekends at the family cottage on Gibson Lake in Muskoka.

Besides continuing to work, what's ahead for Zenn? Well, he and Jane are busy planning a spring trip to Greece, Italy and France.

Caricature drawing of Zenn Mazonas relaxing at his cottage on Gibson Lake in Muskoka.

Veteran CFL official Merv Pilling, holds a fellow official's spot (by standing on his flag) while a ''double interference'' play is reported against Ottawa Rough Rider tight end Tony Gabriel (77) and Edmonton Eskimo defensive back Joe Holliman, in the final minutes of Grey Cup '81.

OUR MAN IN BLACK AND WHITE

CALGARY — Merv Pilling wears two hats. One he wears to work at TransCanada PipeLine's Calgary office, where he is a Graphics Supervisor, while the other he wears with his favourite black and white striped CFL (Canadian football League) official's sweater (42).

Merv is one of only 30 people in Canada to be selected for a staff officiating position (linesman) with the CFL. He has also had the rare opportunity to be an official for two Grey Cup championship finals. Most recently he officiated at the Grey Cup '81 game held in Montreal's Olympic Stadium.

Now, hard at work in his office in Calgary, Merv is immersed in preparing graphics for an upcoming NEB hearing. We spoke to Merv and asked him about the highlights of his 20-year involvement with the CFL and how he got started as an official.

The Grey Cup '81 game was one of the most exciting finals in recent years. What was it like to be an official at the game?

Merv: ''The mood of the game was pretty serious. Edmonton was in trouble from the word go and the harder they tried the worse they got. They did a lot of yelling and screaming until the second half of the game, when the tempo suddenly changed. Coach Murphy must of had a talk with them!

Everyone was very surprised by the outcome of the game because Edmonton was expected to win by a landslide. The final score was only 26 to 23 for the Eskimos and they only pulled ahead in the final minutes of the game, when they scored a field goal.

Maybe they read too many of their own press clippings and got nervous.''

How many officials are there for a Grey Cup game and how are they selected?

Merv: ''We had six officials and two standbys. Officials are selected on the basis of their yearly performance. Part of that means staying out of trouble with the press, the fans and the players. The way you stay out of

trouble is, by paying attention to the game and doing your job. You have to think football instead of daydreaming. You can be distracted if you have other things on your mind like personal problems or problems at work.''

How do you prepare for a game?

Merv: ''I get mentally prepared and start thinking football when we (officials) get together as a group, about four or five hours before the game, and discuss the game.''

How do you cope with angry fans?

Merv: ''Usually we mix with the players at the end of the game and they protect us.

The only time I was in a situation that came close to being violent was in a game between the Edmonton Eskimos and the B.C. Lions in 1975. The Edmonton fans were upset about a few of the calls made against Edmonton (B.C. won) and they kicked down our dressing room door at the end of the game. We needed a police escort out of the stadium.''

What are some of the humorous incidents that you've encountered as an official?

Merv: ''One that comes to mind, that is printable, is when Toronto was playing Montreal, and losing. I took my share of abuse from Leo Cahill during the game and especially when Toronto lost. I later heard that Cahill was fired before I was even out of the shower.

About six weeks later Bud Riley was the new coach for Toronto and they were in a game against Calgary. This time Riley started giving me the 'what for' and it got to the point where he had to be settled down. During a break in the play I walked over to him and said, 'coach, the last time I was yelled at like that, the coach didn't get to the post game party'. I never heard another sound.''

How do you keep in shape between games?

Merv: I run 50 yard sprints, backwards, forwards and sideways, in the neighbourhood park. I find jogging a lonely activity and it hurts my knees. You don't really need it for football because you're usually only running short distances and constantly starting and stopping. The only other thing I do is to cross-country ski.''

How did you get involved in officiating?

Merv: ''This whole thing started as a hobby. A fella at work asked me if I'd like to help a bunch of kids in the community play flag football. I like the game of football and as an interested parent I decided it was a good thing to do.

I got involved in the CFL in 1961 when I answered an ad in the Calgary Herald. I was one of 26 people to be accepted and took an official's training course twice a week for six weeks. Upon ''graduating'' I began officiating for minor league games and by 1972 I became a permanent staff member of the CFL.''

How does your family feel about your involvement in the CFL?

Merv: ''My kids think its wonderful. They like to go to school and tell the other kids that their dad is a CFL official.

I'm not sure my wife is quite as enthusiastic, because I'm gone most weekends. I'm usually just home long enough to drop off my dirty clothes.

Theoretically we're supposed to get one weekend off in five, but it usually works out to be more like one in seven. We have five crews of six officials but they always like to have a standby.''

You supervise a staff of three graphic artists in the Calgary office, what do they think about your second career?

Merv: ''My staff thinks it's great. In fact most people here think it's a terrific thing to do.''

Does being a CFL official help you in your job as a Supervisor?

Merv: ''Well I guess you could say that the job pressures for me at TransCanada are nil compared to the pressure of 50,000 to 60,000 people breathing down your neck at a Grey Cup game. Fans can get pretty excited.

Basically, I guess the benefit is that one job takes away the pressures of the other.''

How long have you worked at TransCanada?

Merv: I was originally hired as a contract draftsman in 1974, and took a staff position, as a Graphics Supervisor, in 1976.

What type of work did you do before joining TransCanada?

Merv: ''I was a consultant.''

Does working in Graphics seem a bit anti-climatic after the excitement of officiating for the CFL?

Merv: ''Not at all. I enjoy my job. If I didn't, I wouldn't be here.''

Hard at work in his Calgary office, Merv Pilling, Graphics Supervisor, Reserves, is busy preparing 2500 maps for the NEB omnibus natural gas hearings in March.

BACK IN SHAPE

Gary Penrose, Manager, Taxation, wearing the TransCanada sash and Murray Young, Co-ordinator of Environmental Programs for Polar Gas, participated in last fall's corporate run. Forty Toronto office employees took part in this annual event.

The plum pudding is finished. The last mince tart is only a memory. Even the cold turkey has disappeared. It's early February now and the recollection of how good all that food tasted is starting to fade. But, unfortunately for many people, the evidence has not started to fade. Belts don't lie! When they are tight, they are tight! So, what can a person do when the waistline is no longer a line, but a long slow curve instead? Well, the newspapers and magazines in January were full of get thin quick plans. They're kind of similar to get rich quick plans. Usually they have the same results.

The reason why the miracle diet and miracle exercise plans don't work is quite simple, according to many medical experts. Since being overweight is due to eating in excess of the body's daily requirements for energy, it's obvious that to lose weight one must either eat less or expend more energy, or both. There is no miracle involved.

The safest and smartest way to approach a new diet is to visit your family physician. Stay away from the fad diets! But as for the other alternative - expending more energy - you can start almost immediately.

First, put down this magazine and take a brisk walk around the block, or several times around your yard, providing of course that you are medically fit to do so. Secondly, pick up the magazine and read on.

The Sports and Fitness Branch of the Ontario Ministry of Culture and Recreations says that a person can lose weight by regular exercise, providing the person adheres to a reasonable diet.

The sports and fitness experts also say that a good target weight is one at which a person feels comfortable. They say it makes sense to ask a doctor what he or she feels would be the right weight.

When a person has achieved the desired weight, the rule is: eat, drink and be merry, but burn off the excess calories.

Any activity burns calories. Some, however, burn more than others. For example, statistics show that three hours of golf burns 720 calories. Whereas 30 minutes of jogging consumes 300 calories. Burning calories by activity is 'fitness talk' for losing weight by exercising.

Statistics prove that the answer to the question about weight loss through exercise is a firm "yes". But, as already stated, a person must diet, as well as exercise or play sports and games, to lose a substantial amount of weight safely and permanently.

Some people start an exercise program by working out at a local fitness club. Some start on their living room floor in front of the television under the guidance of one of the syndicated fitness experts who always seem to tape their shows on a beach, under a palm tree. This can be discouraging because the fitness expert usually has a better body than anyone in the audience can ever hope for or dream of.

To get an experienced opinion on the relationship between sports, games and meaningful exercise, Along The Line spoke with Sam Foster, TransCanada's Manager, Safety. One look at Sam's trim shape, and a short discussion of how he keeps it that way, verifies his authority on the subject.

Before commenting on the role played by sport activities in weight reduction, Sam said there is a very important principle that everyone should be aware of. That is, "the ideal amount of weight loss per week is one pound."

Sam said, "if a person gained 20 pounds and then went on a diet and lost 20 pounds - say within three to four weeks - the person would lose not only fat, but also tissue." The danger here is that the person could be back to his or her original weight but be fatter than before.

Something else to keep in mind, said Sam, is that, "muscle weighs heavier than fat. So when a weight loss or weight gain is noticed, it is important to understand whether it is due to a change in the amount of fat or the amount of muscle on a person's body."

Sam says he agrees with the sports and fitness experts in the provincial government who say that each different sport or activity has its own contribution to make to a person's fitness level. There is no need for a person to push beyond his or her capacity.

"Many people will choose team sports or competitive games simply because they enjoy the social aspects. If this is someone's preference, well and good, but don't let the competitive spirit drive you into over-exertion.

"There are a number of sport activities that do not require people to compete with each other," said Sam. "This includes, walking, hiking and shuffling (or slow jogging) plus cycling, swimming, skipping, and downhill or cross-country skiing. Sports that you can share with other people, and still get a good work out, include tennis and curling.

"These sport activities have at least two things in common. Firstly, they are

fun to take part in. Secondly, they can be enjoyed at varying levels of expertise,'' said Sam.

''The first group - walking, hiking and shuffling - are the simplest and most convenient exercises. They can be fun for anyone. Some like to walk or jog along a scenic route while others like to discover parks and playgrounds or inspect historic sights.

''Many people find they can walk their troubles away, as well as walking off some of that excess weight. Also, this activity can be carried on in senior years.

''Cycling has the advantage of providing not only exercise, but a cheap form of transportation for most of the year. It's a skill most people learn in childhood and never forget. It provides good exercise without the bone-jarring effects of some other sports.

''Curling has always been one of the most popular sports among TransCanada employees,'' said Sam. ''The most vigorous phase of curling is sweeping. It is important to remember never to sweep so vigorously that you can't talk. This is probably one of the best winter activities for those who want to combine exercise with a social occasion.

''Swimming is a good all-round exercise that avoids sudden shifts of weight and jarring of bones. Many experts feel it may be the best all-round exercise. Swimming is helpful in burning up calories and providing flexibility. There has been an increase in the number of indoor pools during the past few years making this sport more of an all-year activity. Again, age is not necessarily a factor in determining who can enjoy and benefit from this activity.

''The thrill of skiing downhill makes it a popular choice for many people. However, cross-country gives the skier a better opportunity to expend energy and, therefore, burns off more calories.''

Sam added that details on these and other sport activities are available from all provincial governments in Canada, as well as numerous other agencies.

''The important thing to remember,'' said Sam, ''is that if you are overweight from too much eating and drinking over a long period of time - you must start to lose weight by eating less or expending more energy. The ideal approach is to do both.

''The really tough part about taking a new approach to weight reduction is that you must not stop. You just have to keep going. Otherwise, you need to put another hole in your belt...and another one next year...and it just never stops!''

Sam concluded his comments by saying that he has a personal creed which has kept him going in the battle to avoid gaining weight. His creed is to, ''Keep in mind that whether a person runs a mile, slow jogs a mile, hikes a mile, shuffles a mile, or fast-walks a mile, every one of those miles (or whatever distance is used) will help - providing a person keeps it up, day after day.''

Sample of 'hubcap clocks' produced by the 'TransCraft' company.

'Brain Waves' and 'TransCraft' Receive Charters

As part of TransCanada's continuing support and committment to the Junior Achievement program (see the July, 1981 issue of Along The Line - ''JA: Linking Youth and Business''), the company is once again sponsoring two JA companies.

This year's companies, known as 'Brain Waves' and 'TransCraft', were formed in the fall of 1981 and will continue to operate until May of this year.

The Advisers for the 'Brain Wave' company are, **Dave Fawcett**, Administration Assistant, **Al Hasky**, Rate Analyst, **Valerie Young**, Rate Assistant, and **Murray Young**, Co-ordinator Environmental Programs, Polar Gas, while advisers for 'TransCraft' include, **Agnes Chung**, Graduate Engineer, **Cindy Clarke**, a university student and a former Junior Achiever and TCPL summer employee (Printing), **Ray Ritcey**, Market Analyst, and **Jason Stacey**, Assistant Market Analyst.

The 'Brain Wave' company has six Junior Achievers and meets every Monday night, for approximately three hours, at JA's east-end Centre. The company is currently hard at work manufacturing ''Jump Peg Games'', which will soon be on the market.

Janelle Ellis, Vice-President, Marketing, for 'Brain Waves' JA company, is presented with the company's charter of incorporation, by Peter Scheirich, Senior Manager, Personnel.

Bob Smith, Vice-President & Controller, Pipeline Division, congratulates Jeff Downs, President of 'TransCraft' JA company, following the charter presentation.

The 'TransCraft' company has 13 Achievers and produces both ''Personalized Rock Concerts'', a type of rock sculpture, and ''Hubcap Clocks'' (see photo).

Volunteer Advisers are essential to the success of the JA program, and TransCanada is proud of its record (since 1973) of recruiting top-notch Advisers. This year's volunteers are no exception, and in recognition of their invaluable service and dedication, Peter Scheirich, Senior Manager, Personnel, organized a luncheon in their honor. This year's annual event was held on January 29, at the Board of Trade, and included various senior company executives. Look for photos and further details in the next issue of Along The Line.

Mainliner Christmas Parties

The Mainliner Club employee Christmas parties continue to be a popular annual event throughout the company. The following photo collage is a further addition to TransCanada's album of fond Christmas memories.

TORONTO — Mainliner Club President George Thompson of Printing welcomes the 1,040 Mainliners to the biggest gathering in years, thanks to good weather conditions.

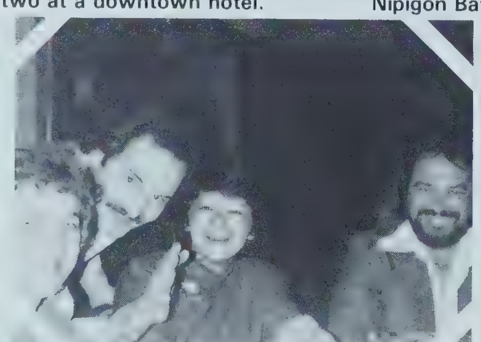
Piper Archie Dewar escorts the Mainliner Club's head table into the Sheraton Centre's grand ballroom. Head table, from the front, included: Secretary Debbie Bell and escort Kent Wallace, Social Director Bev Brush and escort Larry Leslie, President George Thompson and wife Lynn, Recreational Director Gord Griffin and escort Sandy Joyce and Treasurer Diane Thorburn with escort George Aldan.

TORONTO — Enjoying a conversation at the Toronto Christmas party were, from left: Pensioner Art Keay, Barbara and John Beddome, TransCanada's Chairman, and Gerry Foster, Manager, Aviation.

REGINA — Don Mack, Mainliner Recreation Director, presents prizes to winners of the spot dance — guests of Dick Phillips, Sub-District Supervisor, Stn. 17. Looking on, are Joan and Doug McBride, Technician 'M', who are the lucky winners of the Stn. 17 draw for a weekend for two at a downtown hotel.

NIPIGON — Left, Pauline Cataford, wife of Guy Cataford, Manager, Compression Facilities, Toronto office, chats to Bobbi Dnistranski, wife of Jack Dnistranski, Technician 'M', at the Christmas party held in the Dnistranski's home. The party followed a steak and shrimp Christmas dinner at the Nipigon Bay Restaurant.

NORTH BAY — Paul Brousseau, Technician 'M', and Aline Gauthier, wife of Amie Gauthier, Maintenance, enjoy the entertainment at the North Bay Mainliner Club Christmas dinner and dance.



NORTH BAY — Enjoying the North Bay Christmas festivities are from left to right: Sherry Jesse, wife of Bruno Jesse, Maintenance, Terry Moore, Technician, Anne Soltys, Clerk, and Richard Laport, Utility.

BRACEBRIDGE — Dr. Gavin Couper, Eastern Area Manager, enjoys a discussion with Doris Donnelly, Clerk, Personnel department, Toronto office.

THUNDER BAY — Portugese dancers entertained guests with authentic dancing from their homeland.

THUNDER BAY — Guests at the Thunder Bay Mainliner Christmas Party were treated to an evening of ethnic dancing as well as a five-course roast duck dinner. Pictured above are the Croatian dancers.

FALCON LAKE — Centre, Ida and Gord Elder, Technician 'E-M', and their guests, pose for a photo in the ballroom of the Falcon Lake Resort & Club before the evening's dancing began.

IGNACE — Jeff Romas, guest, and Mich Dean, wife of Randy Dean, Utility, dance to the tunes of disc jockey Danny Maurice.

IGNACE — Guests enjoying a smorgasbord dinner at the Stn. 58, Ignace, and Stn. 60, Martin, annual Christmas dinner.

REGINA — Front and center, Dr. Fred Button, General Manager, TransCanada Alaska PipeLines System, Toronto office, chats to District Manager, Stn. 13, Caron, Louis Kopp, on his left, and Sub-District Manager, Stn. 13, Ward Lynch.

Update on Parties

A few changes were made to the list of guests expected to attend the various Mainliner Club Christmas parties, after we went to press with the December issue of Along The Line. They were:

Stn. 2, Burstall: The Plant Supervisor of Dome Petroleum and the Plant Manager of Petro Canada were not able to attend the Burstall Christmas party, as previously reported. Guests who attended, but were not listed were, Doug Dieno, Assistant Supervisor, Dome Petroleum, and his wife, Sharon, and Larry Wolf, Assistant Supervisor, Petro Canada, and his wife, Valerie.

Stn. 17, Regina: Bob Reid, Vice President, Eng/Ops, was unable to attend the Regina party. Toronto guests who attended were Dr. Fred Button, General Manager, TransCanada Alaska PipeLine System, and his wife, Pat.

Stn. 68, Thunder Bay: Mr. and Mrs. Ken Whiteside, Vice President, Accounting & Control, were not able to attend the Thunder Bay Christmas party.

Stn. 123, Bracebridge: The children's Christmas party was held on Sunday, December 13, rather than on December 23, as previously reported.

Stn. 58, Ignace: Mr. and Mrs. Jim Purvis, Central Area Manager, and Mr. and Mrs. Gerald Gannon, Vice-Principle, Ignace High School, were unable to attend this year's Christmas party.

Children's Christmas Parties

Throughout the month of December, Christmas parties for the children of TransCanada employees were organized by Mainliner Clubs at virtually every station along the line. Although it was not possible to obtain photographs from every party, the following pictures indicate that a visit from Santa Claus continues to be a special event everywhere.

BRACEBRIDGE — After an afternoon of watching films such as, "The Wizard of Oz", "Tom Sawyer", and "Bambi", the children at Stn. 123, Bracebridge, were treated to a surprise visit from Santa. Russ Salmon, a local citizen and star of Santa's Village at the Eaton Centre, was the centre of attention.

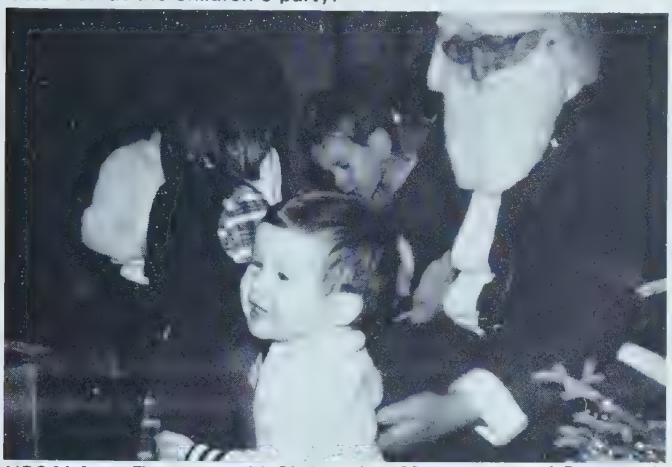
KINGSTON — Five-year-old Krista Thompson, daughter of Rick Thompson, Utility, Stn. 142, enjoys a visit with Santa, alias Larry Quinton, District Technician.

KINGSTON — Lori Peck, 11-year-old daughter of Gary Peck, District Clerk, is pleased with her gift from Santa.

THUNDER BAY — Following a family swim at the Canada Games Swimming Complex in Thunder Bay, a gift-bearing Santa, alias Dave Stewart, a local resident, arrived to visit the children of Stn. 68, Thunder Bay, Stn. 70, Hurkett, and Central Area office employees.

ILE DES CHENES — Children gathered around Rudolf the Red Nose Reindeer and admired his flashing (electronically) red nose at the Ile des Chenes children's Christmas party.

TORONTO — Santa, alias Bill Dillon, Printing, was the centre of attention at the children's party.



UPSALA — Two-year-old Christopher Mutton, son of Rose and Joseph Mutton, Utility, was very excited by his first initiation to Santa Claus. Rose Mutton reports that, "Christopher thought it was just great."

TORONTO — Diane Thorburn, Treasurer of the Mainliner Club, joins youngsters at the Toronto children's Christmas party, and enjoys the afternoon's entertainment.

UPSALA — Larry Dupont, a local Upsala resident, gladly volunteered to play Santa for the Stn. 62, Upsala, & Stn. 64, Raith, children's Christmas party.

RAMORE — These three young ladies demonstrate once again that posing for a camera is always a great thrill for a child. Pictured from left to right are: Chantal Rondeau, daughter of Jean Claude Rondeau, Temporary Maintenance, Jennifer Matthew, daughter of Barry Matthew, District Clerk, and Terri Lynn Hebert, daughter of Cleo Hebert, Clerk.

cross country

NIPIGON

Correspondent: Eini Rathje

Brush and trees were burned after clearing crews prepared the right-of-way for Stn. 75, Nipigon, construction. Any trees on the site, 15 cm in diameter or more, were saved and used to build skids and "rip-rap" for swamps.

The pipe is coated with 20 cm of concrete before being placed in Lake Wanagu for a crossing just west of Stn. 75, Nipigon.

Pipeline sections for the Lake Wanagu crossing are pulled by barge across the lake. Work had to be completed before the lake froze.

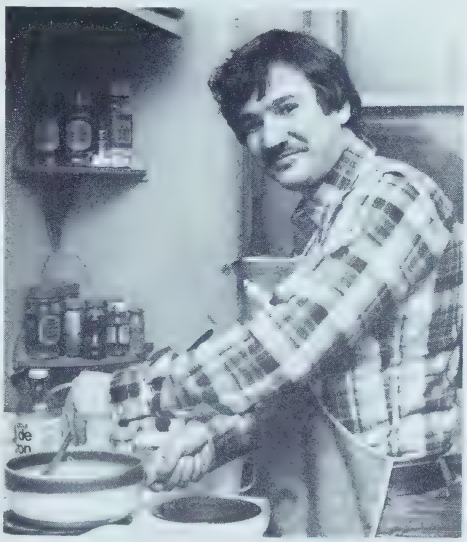
TORONTO

Joyous and uplifting harmonies resounded throughout the Toronto office reception area, on the 54th floor, when over 50 employees gathered together to sing Christmas carols from 8:30 a.m. to 9:00 a.m. on Monday, December 21 to Wednesday, December 23, 1981.

RECIPE

Swiss Cheese FONDUE

The following recipe for Swiss Fondue was contributed by Michel Buser, husband of Juliette Buser, Research Assistant, Research & Translation, Toronto office. Both Michel and Juliette are from Switzerland and have lived in Toronto since 1978. Michel is completing his chiropractor's degree at the Canadian Memorial Chiropractic College in Toronto.



Preparation time: 5 min.
Cooking time: 15-20 min.
Cost: approx. $12 to $16
Serves: 4 to 6

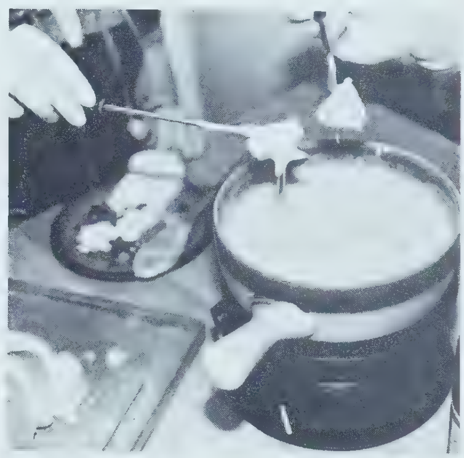
Ingredients:
2 cloves of garlic, crushed
2 cups *dry* white wine
2 lbs. grated cheese: 1 1/2 lb. Swiss Gruyere & 1/2 lb. Emmenthal
1/2 tsp. lemon juice
1 tsp. corn starch (a second tsp. may be used at the end of cooking, if the mixture is too thin)
2 to 3 tsps. of kirsch or vodka
1/2 cup whipping cream
ground nutmeg, pepper, and salt to taste
pinch of baking soda
1 loaf (day-old) French bread - cut into 1 inch cubes.

Preparation:
Ideally, this cheese fondue should be cooked in a Swiss earthenware ''caquelon'', but a heavy-bottom saucepan (e.g. Le Creuset) may be used instead.

1. Rub crushed garlic around the sides and base of the cooking pan.
2. Add wine, and heat over a medium heat until hot (not boiling).
3. Gradually add cheese.
4. Stir continuously with a wooden spoon (in a figure 8 pattern) until melted.
5. Add lemon juice.
6. Dilute corn starch in the kirsch or vodka, and add to mixture.
7. Add cream.
8. Season with ground nutmeg, pepper and salt.
9. When the mixture is smooth and creamy, add pinch of baking soda. Stir continuously or mixture may boil over (due to the reaction of the baking soda).

Remove fondue from stove and place on a burner in the middle of the table. Use forks or skewers to dip bread into the cheese. Serve with white wine or tea, rather than cold drinks.
* Note: A crust of cheese will form on the bottom of the pan. Do not break this crust or the fondue will taste burnt.

Enjoy!



RECIPES

Along the Line

Do people rave over your home cooking, baking, party appetizers or gourmet treats? How about sharing your culinary ''secrets'' with readers of Along The Line!

Here's how. Just send a copy of your recipe, along with a photo of yourself and/or the dish you are submitting, to your local correspondent or to our office:

c/o Martine Becu
Assistant Editor
P.O. Box 54
Commerce Court West
Toronto, M5L 1C2

Also, wherever possible, please include a brief note on where you discovered this recipe, how many people it serves, approximate cooking time and cost.

A few suggested recipes are:

International specialities
Recipes for preparing fish & game
Cooking for one, cooking for two
Fast & Easy
Holiday and seasonal treats (Got any Valentine's Day goodies or suggestions for preparing and designing Easter eggs?)
Recipes on a budget
Cooking for large groups
Outdoor cooking
Gourmet treats
Desserts
Vegetarian cooking.

We look forward to hearing from you.

BURSTALL

Correspondent: Collette Hegg

Emil Stabler, Utility, holds up the gold watch he received from the Mainliner Club, in honor of his many years of service at Stn. 2. Seated next to Emil is his wife, Elsie.

A retirement banquet and party was held in honor of long-time employee, Emil Stabler, Utility, recently, at the Burstall Community Hall.

Emil joined TransCanada PipeLines on February 16, 1958 and began work at a meter station located "across the border" in Alberta. That meter station is now owned by Alberta Trunk Lines.

A year later, Emil was transferred to Stn. 2, Burstall, where he has remained for close to 24 years.

"I've really enjoyed it," said Emil. "But my age caught up with me."

Emil received a gold watch from the Mainliner Club and a scroll of recognition from President and Chief Executive Officer, Rad Latimer, at the banquet.

Emil plans to spend some of his free time fixing up his house and yard, but his main pastime will be to "take it easy".

KENORA

Correspondent: Kim McCaig

A farewell presentation was held for Bill Winterburn, Sub-District Manager, Kenora, in the Stn. 41 lunchroom in early December, 1981, in honor of his recent transfer to Stn. 75, Nipigon.

As a token of their esteem and appreciation, station employees and the Mainliner Club, presented Bill with an electric grinder as a farewell gift. The grinder should come in handy in assisting Bill in his favorite hobby — restoring old vehicles.

Best wishes from Station 49 employees to Bill and Ina in their new location.

A farewell party was held for Rita and Pierre Verrier, at the Knights of Columbus Hall in Kenora, in early January.

Pierre, who has worked at Stn. 49, Kenora, for the past 15 years as a Temporary Inspector, was recently promoted to Sub-District Supervisor for Stn. 92, Mattice, and has relocated to take up his new position.

To commemorate the Verrier's many years of service at Stn. 49, they were presented with a propane barbeque, as a farewell gift from the Mainliner Club and Stn. 49 employees.

District Manager, Bob McMillan and Sub-District Manager, Sandy Harkes, were on hand to say a few fond words of farewell to Pierre and Rita, on behalf of their many friends at the station.

Pierre responded by saying that he had very much enjoyed his 15 years in Kenora, and that he is looking forward to the new challenges of being a Sub-District Supervisor.

Good luck Pierre and Rita.

CARON

Correspondents: Stan Boyko & Barry Huenison

Mainliner Club Election Results

President:	Chris Svab, Utility
1st Vice President:	Garry Downton, Utility
2nd Vice President:	Charles Hellman, Utility
Secretary & Along The Line Correspondent:	Barry Huenison, Utility
Treasurer	Wade Keeler, Maintenance

MATTICE

Correspondent: Jim Erickson

There were two farewell gatherings held recently for employees at Sub-District 92, Mattice.

The first farewell presentation was held at Station 92 for Dan Hunt, who is leaving his post as Sub-District Supervisor, Stn. 92, to accept a new position as Inspector, Central Area Construction, in Thunder Bay.

Dan and his wife, Joan, were given an engraved sterling silver tray as a remembrance of their time spent at Stn. 92.

Best wishes to Dan, Joan and their daughter, Marni.

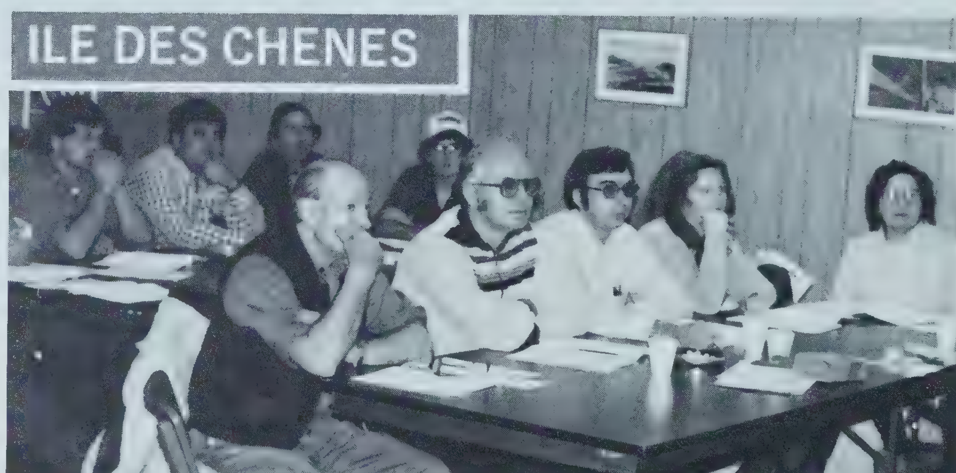
Later in December a second farewell party was held for Ron and Lynne Boucher, at the Chez Huguette Tavern in Mattice.

Ron was recently transferred from Stn. 88, Calstock to Stn. 209, Ancaster, where he will continue his position as a Technician.

Best wishes to Ron, his wife Lynne, and their two children, Tommy and Mary-Lynne, in their new home on Magnolia Drive in Hamilton, Ontario.

Lynne and Ron Boucher, Technician, Stn. 88, Calstock, were presented with a sterling silver serving tray, inscribed with best wishes from their friends at Sub-District 92, Mattice, at a recent farewell party held in their honor.

ILE DES CHENES



Approximately 20 employees and members of their families attended a one day defensive driving school conducted by Western Area Safety Manager, Stan Judson, at Stn. 41. They included: Back row, from left to right: Mickie Carriere, Utility, John Busilla, Utility, Paul Brule, Utility and Ward Fyke, Maintenance.
Front row, left to right: Bill Rae, Technician M, Jake Elias, Technician E, Richard Rohn, Technician E, and Verna Kapkey, wife of Bill Kapeky, Utility, and their daughter.

people

Hello To:

Arambalis, Angelo, Pipeline-Regulatory, Toronto
Bair, A. J. M., Eng/Ops, Eastern Area
Beswick, R. C. W., Eng/Ops, Burstall
Betts, W. J., Eng/Ops, Burstall
Burley, R. S., Eng/Ops, Mattice
Cook, L. L. (Miss), Personnel & Office Services, Calgary
Desjardins, L. E., Energy Studies, Toronto
Di domenico, Nick, Rates, Toronto
Draginov, Louis, Energy Studies, Toronto
Etheridge, Philip, Aviation, Toronto
Fisher, Gregory, Compressor Design, Toronto
Gillingham, N. F., Eng/Ops, Central Area
Green, R. S., Eng/Ops, Central Area
Gudmundsson, K. G., Eng/Ops, Moosomin
Hamfelt, N. T., Personnel, Toronto
Holtz, Michael, Gas Supply Statistics, Calgary
Johnson Filter, Candy (Mrs.), TCPL Resources, Denver, Colorado
King, B. J. (Miss), Printing, Toronto
Kolster, G. E. (Mrs.), Personnel & Office Services, Calgary
Kowman, J. L. (Miss), Information Systems, Toronto
MacIver, I. K., Right-of-Way, Eastern Area
Mak, Eddie, Corp. Financial Planning, Toronto
Mitchell, K. E. (Miss), Accounting, Toronto
Notarfonzo, Antonio, Drafting, Station Design, Toronto
O'Beirne, John, Quality Control, Toronto
Raniseth, N. J., Reserves, Calgary
Ratcliffe, J. G., Eng/Ops, Kenora
Romanow, R. A., Eng/Ops, Regina
Sauve, Claude, Deliverability, Calgary
Schutz, Steve, Pipeline Monitoring, Ellesmere
Smith, G. W., Eng/Ops, Eaglehead
Steinbrenner, G. D., Reserves, Calgary
Sullivan, D. A. (Mrs.), Sales, Toronto
Tomayer, D. A. (Miss), Data Processing, Calgary
Travers, L. C. (Miss), Corporate Financial Planning, Toronto
Truax, E. A., Eng/Ops, Hearst
Urbankiewicz, N. L. (Mrs.), Public Affairs, Toronto
Whitrow, John, Eng/Ops, Ignace
Wiebe, D. F., Data Processing, Calgary
Young, D. S. (Miss), Reserves, Calgary
Yueh, Jia-Ming (Miss), Business Development, Toronto

Changes - December

Abbott, L. (Ms), Graduate Geologist to Geologist I, Reserves, Calgary
Brewer, J. F., Temporary Maintenance, Thunder Bay to Maintenance, Eng/Ops, Eaglehead
Britton, G., Engineering Assistant to Senior Engineering Assistant, Operations, Calgary
Brown, L.S. (Mrs.), Temporary Maintenance to Clerk, Eng/Ops, Ile des Chenes
Dallimore, A. (Mrs.), Geologist I to Geologist II, Reserves, Calgary
Follett, B., Geologist II to Senior Geologist, Reserves, Calgary
Fyke, W., Maintenance, Eng/Ops Spruce to Ile des Chenes
Gillespie, E. R., Senior Technician to Senior Contract Analyst, Operations, Calgary
Halliwell, J. (Ms), Assistant Supervisor to Supervisor, Gas Supply Control, Operations, Calgary
Hannula, D. W., Technician E/M, Nipigon to District Technician, Eng/Ops, Kenora
Horne, C. L., Sub-District Supervisor, Upsala to District Technician, Eng/Ops, Thunder Bay
Lee, D., Assistant Supervising Engineer to Supervising Engineer, Technical Resources, Operations, Calgary
Low, K. K., Engineer I to Engineer II, Eng/Ops Compression, Toronto
Moldenhauer, P. (Miss), Senior Clerk to Assistant Contract Analyst, Operations, Calgary
Rawlyk, J. (Miss), Typist to Clerk/Typist, Deliverability, Calgary
Sager, G. E. (Mrs.), Clerk to Senior Clerk, Payroll, Toronto
Smith, W. A., Assistant Contract Analyst to Sales Analyst, Sales, Toronto
St. Jean, R., Temporary Maintenance, Thunder Bay to Maintenance, Eng/Ops, Eaglehead
Taylor, C., Engineering Assistant to Supervisor, Contract Operation & Testing, Operations, Calgary
Throm, G. H., District Technician, Thunder Bay to Area Technician, Central Area
Verrier, P. N., Technician M, Kenora to Sub-District Supervisor, Eng/Ops, Mattice
Zemliak, N., Utility to Technician, Eng/Ops, Rapid City

Goodbye to:

LaCroix, M., Eng/Ops Administration & Planning, Toronto
Taylor, L. (Miss), Accounting & Financial Studies, Calgary
Wong, R., Deliverability, Calgary

Marriages

Dallimore, Audrey, (nee Nicholson), Reserves, Calgary, August 22
Fenn, K. E., (nee Clayton), Personnel, Toronto, December 23
Henrique, A. D., Printing, Toronto, October 17
Lacharity, K. R., Marten River, August 15
Le Blanc, G. D., Special Projects, Calgary, August 28

SERVICE AWARDS

25 years

George McNeely
Alta. Affairs
Calgary
Oct. 25

Ed Gower
Pipeline Design
Toronto
Jan. 21

15 years

Leo Beker
Aviation
Toronto
Oct. 17

Bryan Coopman
Eng/Ops
St. Boniface
Oct. 24

Joe Williams
Eng/Ops
North Bay
Nov. 16

Allen Dilworth
Eng/Ops
Herbert
Nov. 16

5 years

Harold Massi
Eng/Ops
Ramore
Oct. 8

Arnould Schell
Eng/Ops
Bracebridge
Oct. 22

Nancy Dapp
Alberta Affairs
Calgary
Dec. 20

Anne De Marchi
Personnel
Toronto
Jan. 14

McAuliffe, Brian, R/W & Env., Toronto, Sept. 12
Sager, G. E., (nee Sparkes), Payroll, Toronto, September 26
Searle, D. E., Eng/Ops, Ellesmere, October 23
Stanley, B. R., Eng/Ops, Barrie, October 23
Via, V. H., (nee Sakamoto), Contract Admin., Toronto, August 29
Wallis, C. E., (nee Byers), Internal Audit, Toronto, October 24
Wallis, P. F., Internal Audit, Toronto, October 24

Births

Bridges, Ron, Pipeline Regulatory, Toronto, Boy, Jason, Jan. 18
Hoover, D. J., Accounting, Toronto, Boy, Stuart David, Sept. 23
Ku, P. C. K., Eng/Ops, Toronto, Girl, Victoria Wingsee, May 14
La Croix, Michael, Administration, Toronto, Girl, Morgan Hayes, Oct. 3
Lang, Doug, Eng/Ops, Burstall, Boy, Travis Josh, July 9
Low, Kenneth, Compression Design, Toronto, Boy, Alexander, Oct. 1
Martin, G. B., Eng/Ops, Bracebridge, Girl, Leigh Anne, Nov. 6
Patzer, L. W., Field Transmission, Herbert, Boy, Aaron Lyle, Sept. 6
Potts, S. M., Pipeline Facilities, Toronto, Girl, Krista Gwendolyn, Oct. 18

Retirements

Bernauer, R. A., Eng/Ops, Ignace
Mazonas, Z., Eng/Ops Compression, Toronto
Stabler, E., Eng/Ops, Burstall

Jack Flood
Eng/Ops
Thunder Bay
Jan. 21

John Cepukas
Drafting
Toronto
Feb. 1

Ray Hicks
Eastern Area Office
Toronto
Feb. 6

Irv Fee
Compression Supervision
Toronto
Feb. 11

Bernie Aitken
Contract Admin.
Toronto
Feb. 11

Tony Humphries
IPEL
Denmark
Jan. 9

Dave Russell
Business Develop.
Calgary
Jan. 9

Peter Bishop
Systems & Data Processing
Toronto
Jan. 16

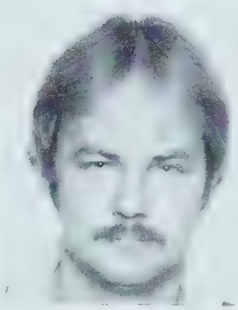
Dave O'Hare
Contract Admin.
Toronto
Jan. 23

Dave Barlow
Pipeline Design
Toronto
Feb. 9

Barry Bergstrom
Accounting
Calgary
Jan. 17

Henry Boesch
Pipeline Facilities
Toronto
Jan. 18

Joanne Dobosz
R/W & Env. Affairs
Toronto
Jan. 28



Thomas McLean
Eng/Ops
Grafton
Jan. 28

Bruce Garrison
Polar Gas
Toronto
Feb. 1

Gena Ralston
Gas Measurement
Toronto
Feb. 7

Pat Bryant
Polar Gas
Toronto
Feb. 11

Paul Szabo
Treasury
Toronto
Feb. 14

30 Years
Great Lakes

William Kramer
Detroit
January

Rhonda Booth

"ALONG THE LINE'S" FIRST

"Correspondent of the Year Award"

Along The Line's first "Correspondent Of The Year Award", was won by Rhonda Booth of Station 41, Ile des Chenes. Rhonda's husband, Brian "Boots" is a Survey Party Chief for Western Area.

Rhonda wins a 35 mm camera and a framed certificate. The award reads: "This award is presented to Rhonda Booth of Station 41, Ile des Chenes, in recognition of outstanding reporting and service in the role of Along The Line correspondent during 1981".

With her husband involved in pipeline construction, Rhonda has travelled all across the system, since they joined TransCanada at Swift Current, Saskatchewan, 20 years ago.

The Booths have three children and live in the town of Niverville, 13 kilometres south of Station 41. They enjoy cross-country skiing and travel.

Rhonda describes herself as being a Domestic Engineer, filling her days with cooking, dieting, sewing, growing things, swimming and cross-country skiing.

When asked to be a correspondent in the fall of 1980, Rhonda says that she was shocked, since she felt she couldn't write, type or spell.

Describing the past year as correspondent, Rhonda said, "All in all its been a wonderful year - the learning experience, the people, everything has been a lot more fun than work. I received tremendous support from everyone. The people at Station 41, and the Western Area office lead such interesting lives, I don't think I'll ever be short of material."

An honorable mention in the "Correspondent of The Year Award" contest goes to Chuck Thompson, Central Area Safety Co-ordinator.

TransCanada PipeLines Limited

Notice of 1996 Annual Meeting of Shareholders

and Management Proxy Circular

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TransCanada PipeLines Limited

Dear Shareholder:

You are invited to attend the Annual Meeting of the common shareholders of TransCanada PipeLines Limited which will be held at the Hotel Saskatchewan, Regina, Saskatchewan, Canada on April 23, 1996 at 10:30 a.m. (local time).

The items of business to be acted on by shareholders are set forth in the notice of meeting and management proxy circular. Your participation in this meeting is very important to the Company, regardless of the number of shares you hold. If you are unable to attend in person, please complete, date, sign and promptly return the enclosed form of proxy in the envelope provided for this purpose. If you intend to be present at the meeting, you may nevertheless find it convenient to express your views in advance by returning the form of proxy duly completed.

Proxies are counted and tabulated by Montreal Trust Company of Canada, the transfer agent of the Company, in such a manner as to preserve the confidentiality of individual shareholder votes, except (a) where the shareholder has made a written comment on the proxy form which is clearly intended for management, (b) as necessary to meet legal requirements or (c) in the event of a proxy contest.

Following the custom of past meetings, we will review with you the business and affairs of the Company and our outlook for the future.

Sincerely yours,

G. J. Maier
Chairman of the Board

March 5, 1996

YOUR VOTE IS VERY IMPORTANT. THE BOARD OF DIRECTORS URGES YOU TO COMPLETE, DATE, SIGN AND RETURN TODAY THE ENCLOSED PROXY IN THE ENCLOSED ENVELOPE. IF YOUR SHARES ARE HELD IN THE NAME OF A BROKER OR NOMINEE, YOU MUST PROVIDE VOTING INSTRUCTIONS TO THE BROKER OR NOMINEE IN ORDER FOR YOUR SHARES TO BE REPRESENTED AT THE ANNUAL MEETING. FOR ASSISTANCE OR FURTHER INFORMATION, PLEASE CALL TRANSCANADA'S INVESTOR RELATIONS DEPARTMENT TOLL-FREE AT 1-800-361-6522 OR CALL MONTREAL TRUST (403) 267-6555

TransCanada PipeLines Limited

TransCanada PipeLines Tower
111 – Fifth Avenue S.W.
Calgary, Alberta
Canada T2P 3Y6

NOTICE OF ANNUAL MEETING

NOTICE IS HEREBY GIVEN that the Annual Meeting (the "Meeting") of the holders of common shares (the "common shares") of TransCanada PipeLines Limited will be held at the Hotel Saskatchewan, Radisson Plaza, 2125 Victoria Avenue, Regina, Saskatchewan on Tuesday, April 23, 1996 at 10:30 a.m. (local time) for the following purposes:

(1) to receive the consolidated financial statements for the year ended December 31, 1995 and the auditors' report thereon;

(2) to elect directors to serve for the ensuing year;

(3) to appoint auditors to hold office; and

(4) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of common shares are invited to attend the Meeting. Shareholders of record at the close of business on March 5, 1996 will be entitled to vote at the Meeting unless a shareholder has transferred shares after that date and the new holder of such shares establishes proper ownership and requests, not later than 10 days before the Meeting, to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to complete, date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting. To be used at the Meeting, proxies must be received before 4:30 p.m. (Calgary time) on Monday, April 22, 1996 by our transfer agent, Montreal Trust Company of Canada, Stock Transfer Services, 530 – 8th Avenue S.W., Calgary, Alberta, Canada T2P 3S8 or be presented at the Meeting.

The 1995 Annual Report, the Management Proxy Circular and a form of proxy accompany this Notice of Meeting.

By Order of the Board of Directors,

Alison T. Love.

Alison T. Love
Corporate Secretary and
Associate General Counsel

Calgary, Alberta
March 5, 1996

TransCanada PipeLines Limited

MANAGEMENT PROXY CIRCULAR

General Information

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by management of TransCanada PipeLines Limited (the "Company" or "TransCanada") to be used at the annual meeting and at any adjournment or adjournments thereof (the "Meeting") of holders of common shares (the "common shares" or "shares") of the Company to be held in Regina, Saskatchewan on Tuesday, April 23, 1996, at the place and for the purposes set out in the accompanying Notice of Annual Meeting (the "Notice of Meeting").

It is anticipated that copies of this Circular and the form of proxy for shareholders will be first distributed to shareholders on or before March 27, 1996. The cost of soliciting proxies will be borne by the Company. While most proxies will be solicited by mail only, some shareholders may also be contacted by Company employees personally or by telephone. In addition, the Company will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of common shares registered in the names of such brokers, custodians, nominees and fiduciaries.

Unless otherwise stated, the information contained in this Circular is given as of March 5, 1996 and all dollar amounts set forth herein are in Canadian dollars.

Record Date for Notice of Meeting and Provisions Relating to Voting

The Board of Directors of the Company has fixed March 5, 1996 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share shown as registered in such holder's name on the list of shareholders prepared as of the close of business on the record date, unless a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership and requests the Corporate Secretary of the Company, not later than the close of business on April 12, 1996, to include such holder's name on the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 530 – 8th Avenue S.W., Calgary, Alberta T2P 3S8 and will be available for inspection at the Meeting.

Appointment of Proxy Holders

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 4:30 p.m. (Calgary time) on April 22, 1996, or must present a properly executed proxy at the Meeting. All shares represented by a properly executed proxy will be voted or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted "For" the election of the persons nominated for election as directors and "For" the appointment of KPMG Peat Marwick Thorne, Chartered Accountants, as auditors.

The enclosed form of proxy, when properly signed, confers discretionary authority on the person or persons named to vote on any amendment to matters identified in the Notice of Meeting and on any other matter properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted at the discretion of the person or persons named therein. The persons named in the form of proxy are officers of the Company.

Revocability of Proxies

A shareholder may revoke a proxy by depositing an instrument in writing executed by such shareholder or such shareholder's attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of the Company, 111 – 5th Avenue S.W., Calgary, Alberta, T2P 3Y6, at any time up to and including the last business day preceding the day of the Meeting, or with the Chairman of the Meeting on the day of the Meeting.

Voting Shares and Principal Shareholders

The number of outstanding common shares entitled to be voted at the Meeting is 203,826,905. Each such share entitles the holder thereof to one vote and such shares are the only class of the Company's shares entitled to be voted at the Meeting.

To the knowledge of the directors and officers of the Company, based on information at March 5, 1996, no individual or corporation beneficially owned, directly or indirectly, or exercised control over, more than 5% of the outstanding common shares of the Company.

Business to be Transacted at the Meeting

1. Financial Statements

The consolidated financial statements of the Company for the year ended December 31, 1995 and the report of the auditors thereon will be placed before the Meeting. Additional copies of the Annual Report (which contains the financial statements), in English or French, may be obtained from the Corporate Secretary of the Company upon request, and will be available at the Meeting.

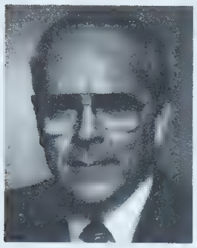
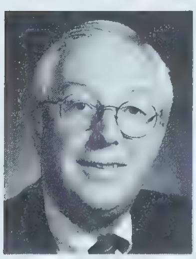
2. Election of Directors

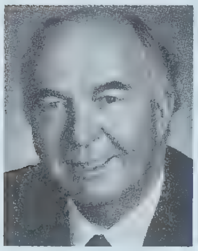
At a meeting held on February 23, 1996, the Board of Directors approved an increase in the number of directors, effective at the time of the Meeting, from 12 to 13. Except for Messrs. Hawkins and Paul, the nominees whose names are set forth below are all currently directors of the Company. Mr. J. V. Raymond Cyr, a current director, has advised the Company that he does not wish to stand for re-election. The Governance Committee of the Board of Directors reviews annually the qualification of persons proposed for election to the Board of Directors and submits its recommendations to the Board for consideration. The persons nominated below are, in the opinion of the Board of Directors, and in the opinion of management, well qualified to act as directors for the ensuing year. Each nominee has established his or her eligibility and willingness to serve as a director if elected. The persons named in the form of proxy are officers of the Company and intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the form of proxy to withhold such vote. If, prior to the Meeting, any of the listed nominees becomes unable or unwilling to serve, the persons named in the form of proxy will have the right to use their discretion in voting for a properly qualified substitute. Each director elected will hold office until the next annual meeting or until his or her successor is duly elected or appointed.

Information Concerning the Directors

General Information

Set forth below are the names of the 13 nominees, their municipalities of residence, all positions and offices held by them with the Company and its significant affiliates, their principal occupations or employment during the past five years, the year from which each director has continually served as a director of the Company and the number of shares of the Company owned by each of them or over which they exercise control or direction.

	Proposed Nominee[1]	Principal Occupation	Director Since	Holdings of Securities of TransCanada[2] (common shares)
	Robert Emmet Dineen, Jr. New York, New York	Partner of Shearman & Sterling, Attorneys-at-Law, New York, New York.	April 1989	2,961
	Wendy Dobson Ashburn, Ontario	Professor, Faculty of Management and Director, Centre for International Business, University of Toronto, Toronto, Ontario.	April 1992	500
	Louis Yves Fortier, C.C., Q.C. Montréal, Québec	Chairman and a senior partner of Ogilvy Renault, Barristers and Solicitors, Montréal, Québec. Prior to January 1992 Mr. Fortier was Canada's Ambassador and Permanent Representative to the United Nations in New York.	April 1992	1,500
	Kerry L. Hawkins Winnipeg, Manitoba	President of Cargill Limited, Winnipeg, Manitoba (grain handlers and merchants, transporters and processors of agricultural products).		

	Proposed Nominee[1]	Principal Occupation	Director Since	Holdings of Securities of TransCanada[2] (common shares)
	Thomas Edward Kierans Toronto, Ontario	President and Chief Executive Officer of the C.D. Howe Institute, Toronto, Ontario (independent, non-profit research and educational institution).	April 1990	3,389
	The Hon. Donald Stovel Macdonald, P.C., C.C. Toronto, Ontario	Counsel to McCarthy Tétrault, Barristers and Solicitors, Toronto, Ontario. Prior to September 1991 he served the Government of Canada as High Commissioner for Canada in London, England and from 1977 to 1991 he was a partner of McCarthy and McCarthy (now McCarthy Tétrault).	October 1991	200
	Gerald James Maier Calgary, Alberta	Chairman of the Company. Prior to April 1994 Mr. Maier was Chairman and Chief Executive Officer of the Company, prior to April 1993 he was Chairman, President and Chief Executive Officer of the Company and prior to February 1992 he was President and Chief Executive Officer of the Company.	December 1983	491,892[3]
	James Robert Paul Houston, Texas	Chairman, Worldwide Cellular Inc. (portable cellular phone rental services) Houston, Texas. Prior to 1994 Mr. Paul was President and Chief Executive Officer of The Coastal Corporation.		
	Harry George Schaefer Calgary, Alberta	Chairman of the Board of TransAlta Corporation (holding company), TransAlta Utilities Corporation ("TransAlta Utilities") (generation and sale of electric energy) and TransAlta Energy Corporation (independent power development), Calgary, Alberta. Prior to May 1993 Mr. Schaefer was also Chief Financial Officer of TransAlta Utilities and prior to May 1991 he was Deputy Chairman of the Board and Chief Financial Officer of TransAlta Utilities.	April 1987	2,000

	Proposed Nominee[1]	Principal Occupation	Director Since	Holdings of Securities of TransCanada[2] (common shares)
	Allan Richard Taylor North York, Ontario	Director of Royal Bank of Canada ("Royal Bank") Toronto, Ontario (Canadian chartered bank). Prior to January 1995 Mr. Taylor was Chairman of Royal Bank and prior to November 1994 he was Chairman and Chief Executive Officer of Royal Bank.	December 1983	1,200
	Joseph Dale Thompson Edmonton, Alberta	Chairman, President and Chief Executive Officer of PCL Construction Holdings Ltd., Edmonton, Alberta ("PCL") (general construction contractors). Prior to October 1993 Mr. Thompson was Vice-Chairman, President and Chief Executive Officer and prior to May 1991 he was Vice-Chairman and Chief Operating Officer of PCL.	April 1995	3,610[4]
	George William Watson Calgary, Alberta	President and Chief Executive Officer of the Company. Prior to April 1994 Mr. Watson was President of the Company and prior to April 1993 he was Chief Financial Officer of the Company. He was appointed Chief Financial Officer in July 1990.	August 1993	78,973[5]
	Margaret Kent Witte Kirkland, Washington	President and Chief Executive Officer of Royal Oak Mines, Kirkland, Washington (mining company).	April 1995	500

Notes:

(1) *All nominees are Canadian residents, with the exception of Mr. Dineen, Jr., Mr. Paul and Ms. Witte who are United States residents. The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by each of the nominees. Except as indicated in the Notes below, the nominees have sole voting and dispositive power with respect to the securities listed above.*

(2) *As to each class of shares of TransCanada, the percentage of outstanding shares beneficially owned by any one director or nominee or by all directors and officers of the Company as a group (of which there are 40) does not exceed 1% of the class so owned.*

(3) *The shares listed include 84,792 shares owned directly by Mr. Maier, 77,500 shares acquired pursuant to the share purchase feature of KESIP (defined below), 283,000 shares as to which Mr. Maier has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP and 46,600 shares held by a privately owned company controlled by Mr. Maier. KESIP is defined and described under "Information Concerning the Compensation of Directors and Officers".*

(4) *The shares listed are held by a family trust, the beneficial owners of which are children of Mr. Thompson and Mr. Thompson's wife. Mr. Thompson disclaims beneficial ownership of such shares.*

(5) *The shares listed include 11,433 shares owned directly by Mr. Watson and 67,540 shares as to which Mr. Watson has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP.*

Information Concerning the Compensation of Directors and Officers

Compensation of Directors

For the financial year ended December 31, 1995, the Company paid each director who was not an employee of the Company as follows: an annual retainer fee of $17,000; an annual fee of $2,700 for each Committee of the Board of Directors of which he or she was a member; and an additional fee of $2,000 for each Committee of the Board of Directors of which he or she was Chairman. The Company also paid each such director a fee of $1,200 for attendance at each meeting or adjourned meeting of the Board of Directors or a Committee thereof, a travel fee of $1,000 for travelling to meetings where round-trip travel time to meetings exceeded three hours, and reimbursed the director for out-of-pocket expenses incurred in attending such meetings. The Directors who are U.S. residents were paid in U.S. dollars. Directors who are also employees of the Company were not paid directors' fees. The Chairman of the Board was paid $200,000 as a retainer, payable to him in respect of his duties as Chairman.

Compensation of Officers

Description of Plans

A) Key Employee Stock Incentive Plan

In 1979 the Company established the Key Employee Stock Incentive Plan ("KESIP"). Prior to 1995, KESIP included both a stock option feature and a share purchase feature. In April, 1995, shareholders of the Company approved certain amendments to KESIP, including the discontinuation of the share purchase feature of the plan, and the extension of such a plan to December 31, 2004.

The amended and restated plan is now called the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)"). All officers of the Company are members of KESIP (1995). Directors who are not employees of the Company are not eligible to participate in KESIP (1995). The maximum number of additional common shares approved by the shareholders in 1995 for issuance under KESIP (1995) was 10,000,000 of which 939,352 common shares were issuable under unexpired options as at December 31, 1995. Under KESIP and KESIP (1995) approximately 3,206,000 common shares were issuable under unexpired options as at December 31, 1995.

KESIP (1995) is administered by the Human Resources Committee of the Board of Directors. Options to purchase common shares of the Company are awarded to KESIP (1995) participants. The exercise prices are determined by the Human Resources Committee at the time the options are awarded and are the weighted average closing prices of the common shares of the Company on The Toronto Stock Exchange on the five trading days immediately preceding the award dates.

Twenty percent of the common shares subject to an option are eligible for purchase upon each of the first five anniversary dates following the award date of the option. At the time of awarding an option, the expiry date (the last day on which the option is exercisable, generally 10 years from the date on which it was granted) is established.

Under a Shareholder Rights Plan (the "Rights Plan") adopted by the Company in 1995, the Human Resources Committee shall make appropriate adjustments in the number of common shares under an option and in the exercise price if prior to the complete exercise of any option a Flip-in Event (as defined in the Rights Plan to be a transaction in or pursuant to which any person becomes, subject to

specified exceptions, a holder of 20% or more of the common shares) occurs and the Rights issued under the Rights Plan are separated from the common shares and are exercisable on a dilutive basis.

B) **Performance Unit Plan**

In 1995 the Company established a Performance Unit Plan ("PUP"). The purpose of PUP is to provide an incentive to the Company's senior management to focus, in their decision making and business strategies, on factors that will enhance the capital appreciation of the common shareholders' investment in the Company and to maximize the Company's current earnings thereby enabling common share dividends to be paid by the Company to the maximum extent possible. Officers or directors holding salaried employment with the Company or any of its subsidiaries were eligible to participate in PUP in 1995. As at December 31, 1995, 939,352 units under PUP were outstanding.

PUP is administered by the Human Resources Committee of the Board of Directors. Under PUP, a unit shall accrue annually a cash amount equal to the dividends paid on a common share in a financial year, provided the Company's total shareholder return is equal to or greater than that of the peer group index for such financial year, or if the Company's total shareholder return is less than that of the peer group index for such year, such lesser amount, if any, as may be determined by the Human Resources Committee in its absolute discretion. The actual amount accrued on a unit during a financial year may nevertheless not exceed the dividends paid on one common share during such financial year.

A unit may be exercised for the amount accrued on the unit at any time during the period which begins on the fifth anniversary of the award date and shall be deemed to be exercised automatically on the tenth anniversary of the award date. However, at the time of exercise the market price of a common share plus the amount accrued on the unit must be equal to or greater than the market price of a common share on the award date of the unit, and a KESIP (1995) option, if any, awarded on the same date as the unit, must have been previously exercised.

C) **Incentive Compensation Program**

In 1987 the Company adopted an Incentive Compensation Program ("ICP") whereby officers and senior management employees of the Company and its subsidiaries are eligible to receive annual cash awards in lieu of a certain portion of salary. The cash awards are determined during the first quarter of the financial year following the financial year to which the awards relate. The awards can range from nil to preset limits thus placing a portion of the compensation at risk each year. The intention of the plan is to link closely participants' overall cash compensation to the performance of the Company and its business units as well as to their respective individual performance. By doing so, officers and senior management are encouraged to work towards the attainment of overall Company and business unit goals. Eligibility for participation in and the criteria used to determine amounts payable under the ICP for officers are determined by the Human Resources Committee.

D) **Employee Savings Plan**

The Employee Savings Plan ("ESP") was introduced by the Company in 1979 to provide all employees of the Company with a means to participate in the profit performance of the Company. Officers participate in this plan on the same basis as all other TransCanada employees. Under a flexible benefit plan established in 1993, each employee is entitled to a contribution by the Company of an amount equal to 3% of that employee's salary for the purchase of common shares. Additional amounts of up to an approximate average of 3.5% of the employee's salary may be contributed by the Company depending on the employee's desired use of flexible benefit credits. The shares and the dividends thereon are allocated to the employees' accounts once a year. The vesting of the shares allocated under the ESP depends on the number of credited years service an employee has with the Company. After five years credited service all shares allocated to an employee are vested.

Summary Compensation Table

The following table provides a summary of the remuneration earned by the Chief Executive Officer and the four other most highly compensated policy-making executive officers of TransCanada (collectively, the "Named Executive Officers") for services rendered in all capacities during the financial years ended December 31, 1995, 1994 and 1993. Specific aspects of this compensation are dealt with in further detail in the following tables.

	Annual Compensation				Long Term Compensation		
					Awards		
Name and Principal Position of the Named Executive Officers	Year	Salary $	Bonus[a] $	Other Annual Compensation[b] $	Securities Under Options Granted[c] (#)	LTIP Payouts $	All Other Compensation[d] $
G. W. Watson President and Chief Executive Officer	1995 1994 1993	$500,000 441,389 310,729	$175,000 130,000 100,000	$56,588 45,799 31,135	94,992 45,100 27,500	0 0 0	$52,004 48,935 58,242
R. A. M. Young Senior Vice-President, Law	1995 1994 1993	254,000 244,000 235,000	80,000 75,000 59,000	27,879 25,870 20,309	29,121 16,900 14,100	0 0 0	22,800 20,125 15,000
R. J. Reid[e] Senior Vice-President	1995 1994 1993	213,000 235,532 257,960	100,000 60,000 55,904	34,763 30,721 35,191	31,335 14,200 12,000	0 0 0	6,000 4,500 0
G. J. Couper Senior Vice-President, Strategic Resources	1995 1994 1993	230,000 220,000 206,000	75,000 65,000 52,000	38,004 41,464 0	32,099 15,200 12,300	0 0 0	0 0 12,800
A. J. Epp[f] Senior Vice-President	1995 1994 1993	237,000 229,000 75,000	60,000 70,000 17,000	29,870 15,531 0	28,357 15,900 21,200	0 0 0	0 0 0

Notes:

(a) Amounts referred to in this table as "Bonus" are paid pursuant to the Company's ICP (described above under "Description of Plans — Incentive Compensation Program"). These amounts were paid in cash in the year following the year in which they were earned.

(b) Perquisites and other personal benefits do not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus for any of the Named Executive Officers. The amounts in this column include the value of salary paid in lieu of vacation, the imputed interest benefit from loans made pursuant to a share purchase feature formerly contained in KESIP (described above under "Description of Plans — Key Employee Stock Incentive Plan" and below under "Indebtedness of Directors, Executive Officers and Senior Officers Under Securities Purchase Programs"), and TransCanada's contributions under ESP (described above under "Description of Plans — Employee Savings Plan").

(c) The amounts in this column reflect the number of stock options granted to each of the Named Executive Officers in each of the years referred to. A similar number of performance units were granted in 1995 under PUP (described above under "Description of Plans — Performance Unit Plan").

(d) The amounts in this column include amounts paid to the Named Executive Officers in 1995 by subsidiaries and affiliates of TransCanada (including directors' fees paid by affiliates and amounts paid for serving on management committees of partnerships in which TransCanada holds an interest).

(e) R. J. Reid was appointed as Senior Vice-President of the Company on January 1, 1994, prior to which he was President of Iroquois Pipeline Operating Company, a U.S. subsidiary of the Company. Prior to June 1, 1994 Mr. Reid was paid in U.S. dollars and the amounts referred to reflect conversion rates in effect at the times of such payments.

(f) A. J. Epp was appointed as an officer of the Company in September 1993.

The following table sets forth information regarding long-term incentive plan awards made to the Named Executive Officers during the financial year ended December 31, 1995. See "Description of Plans — Performance Unit Plan" for information with respect to this plan.

Long-Term Incentive Plans — Awards in 1995

Name	Securities, Units or Other Rights (#)[a]	Performance or Other Period Until Maturation or Payout[b]	Estimated Future Payouts Under Non-Securities Price-Based Plans		
			Threshold (#)	Target (#)	Maximum ($)
G. W. Watson	30,992	July 31, 2005	N/A	N/A	30,992
	64,000	December 6, 2005	N/A	N/A	N/A
R. A. M. Young	12,421	July 31, 2005	N/A	N/A	12,421
	16,700	December 6, 2005	N/A	N/A	N/A
R. J. Reid	10,435	July 31, 2005	N/A	N/A	10,435
	20,900	December 6, 2005	N/A	N/A	N/A
G. J. Couper	11,199	July 31, 2005	N/A	N/A	11,199
	20,900	December 6, 2005	N/A	N/A	N/A
A. J. Epp	11,657	July 31, 2005	N/A	N/A	11,657
	16,700	December 6, 2005	N/A	N/A	N/A

Notes:

(a) *In 1995 two PUP awards were made, the first on July 31, 1995 and the second on December 6, 1995. Accordingly, two lines of information are shown for each of the Named Executive Officers. The Human Resources Committee determined that $1.00 accrued in respect of each unit for the awards made on July 31, 1995. No amount has been accrued in respect of the awards made on December 6, 1995. The awards made on December 6, 1995 will not be eligible for accrual until January 1, 1996. These amounts have not and may never be received by the Named Executive Officers. (See "Description of Plans — Performance Unit Plan").*

(b) *The exercise period for these units begins on the fifth anniversary of the award date and ends on the tenth anniversary of such a date.*

Options Granted During the Most Recently Completed Financial Year[a]

The following table sets forth the grants under KESIP (1995), during the financial year ended December 31, 1995, to each of the Named Executive Officers. See "Description of Plans — Key Employee Stock Incentive Plan" for information with respect to this plan.

Name	Number of Common Shares Under Options Granted[b]	% of Total Options Granted to Employees in 1995	Exercise Price ($/share)[c]	Market Value of Shares Underlying Options on the Date of Grant ($/share)	Expiration Date
G. W. Watson	30,992	9.58	18.400	18.625	July 31, 2005
	64,000	10.11	18.455	18.500	December 6, 2005
R. A. M. Young	12,421	3.84	18.400	18.625	July 31, 2005
	16,700	2.64	18.455	18.500	December 6, 2005
R. J. Reid	10,435	3.22	18.400	18.625	July 31, 2005
	20,900	3.30	18.455	18.500	December 6, 2005
G. J. Couper	11,199	3.46	18.400	18.625	July 31, 2005
	20,900	3.30	18.455	18.500	December 6, 2005
A. J. Epp	11,657	3.60	18.400	18.625	July 31, 2005
	16,700	2.64	18.455	18.500	December 6, 2005

Notes:

(a) *In 1995 two stock option grants were made, the first on July 31, 1995 and the second on December 6, 1995. Accordingly, two lines of information are shown for each of the Named Executive Officers.*

(b) *Twenty percent of the shares under option are purchasable on and after each of the first five anniversary dates of the granting of the option.*

(c) *The exercise price is equal to the weighted average closing price of TransCanada's common shares on The Toronto Stock Exchange on the five trading days immediately prior to the grant of the options.*

Aggregated Option Exercises During 1995 Financial Year and 1995 Financial Year-End Option Values

The following table summarizes, for each of the Named Executive Officers, the number of stock options, if any, exercised during the financial year ended December 31, 1995, the aggregate value realized upon exercise and the total number of unexercised options, if any, held at December 31, 1995. The value realized on exercise is the difference between the closing price of the underlying common shares on the exercise date and the exercise price of the option. The value of unexercised "in-the-money" options at the financial year end is the difference between the exercise price and the closing price of TransCanada's common shares on The Toronto Stock Exchange on December 29, 1995 which was $18.875 per share. These amounts, unlike the amounts shown in the column "Aggregate Value Realized", have not been and may never be realized. The underlying options have not been and will not necessarily be exercised and the actual gains, if any, on exercise will depend on the value of TransCanada's common shares on the date of exercise.

Name of Named Executive Officer	Shares Acquired on Exercise[a] (#)	Aggregate Value Realized[b] ($)	Unexercised Options at December 31, 1995 (#)		Value of Unexercised in-the-Money Options at December 31, 1995[c] ($)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
G. W. Watson	0	0	67,540	158,252	99,035	110,916
R. A. M. Young	0	0	51,800	60,121	74,883	46,031
R. J. Reid	0	0	45,540	57,295	85,677	41,286
G. J. Couper	0	0	51,420	59,579	94,914	43,636
A. J. Epp	0	0	11,660	53,797	4,770	31,631

Notes:

(a) *These numbers indicate, for each of the Named Executive Officers, the number of shares acquired pursuant to the exercise of options during the most recently completed financial year.*

(b) *These amounts indicate the net value realized on the exercise of stock options.*

(c) *These amounts do not take into account unexercised options that were not "in-the-money" on December 31, 1995.*

Indebtedness of Directors, Executive Officers and Senior Officers Under Securities Purchase Programs

As at March 5, 1996, the aggregate amount of indebtedness to TransCanada incurred in connection with the purchase of securities of TransCanada by all directors, officers, employees and former directors, officers and employees of TransCanada or any of its subsidiaries amounted to $4,318,972.

The following table sets forth the indebtedness incurred by directors, executive officers and senior officers for the purchase of securities of TransCanada.

Name and Principal Position	Involvement of Issuer or Subsidiary	Largest Amount Outstanding During the Financial Year Ended Dec. 31, 1995[a] $	Amount Outstanding as at Mar. 5, 1996 $	Financially Assisted Securities Purchases During Year Ended Dec. 31, 1995 #	Security for Indebtedness[b]
G. J. Maier Chairman	TransCanada as Lender	1,209,422	782,790	NIL	TransCanada 77,500
G. J. Couper Senior Vice-President, Strategic Resources	TransCanada as Lender	148,293	12,678	NIL	Talisman 204
R. J. Reid Senior Vice-President	TransCanada as Lender	243,042	164,069	NIL	TransCanada 13,600 Talisman 452
M. Durnin Senior Vice-President	TransCanada as Lender	98,883	0	NIL	
R. B. Hodgins Senior Vice-President and Chief Financial Officer	TransCanada as Lender	20,012	18,459	NIL	TransCanada 1,120 Talisman 160
R. T. Smith Vice-President and Controller	TransCanada as Lender	76,325	9,451	NIL	TransCanada 1,020
J. W. Stinson Vice-President, Human Resources	TransCanada as Lender	4,168	4,168	NIL	Talisman 125

Notes:

(a) *The securities in respect of which the above indebtedness was incurred, were purchased during the years 1985 to 1987 and were common shares of TransCanada, pursuant to the terms of the share purchase feature of KESIP which no longer exists. The loans are interest-free.*

(b) *During the period in which the loan is unpaid, the shares are held as security for the payment of the loan. This column reflects the aggregate number of common shares held as security for the loan amount as at March 5, 1996. In 1989, pursuant to a Plan of Arrangement, the shares of Encor Inc. ("Encor"), formerly a subsidiary of the Company, were distributed to the shareholders of the Company and accordingly certain KESIP participants owned both TransCanada and Encor shares. In 1993, pursuant to another Plan of Arrangement, the shares of Encor were acquired by Talisman Energy Inc. ("Talisman") and the companies were amalgamated. As a result, some KESIP participants own both TransCanada and Talisman shares which are held in trust as security for the loans.*

Pension and Retirement Benefits

The Named Executive Officers and all other employees participate in the Company's non-contributory defined benefit pension plan (the "Pension Plan"). Annual Pension Plan benefits are integrated with Canada Pension Plan benefits and are based on between 1.25% and 1.75% of a person's final average plan earnings times the total number of years in the Pension Plan ("Credited Pensionable Service"). Final average plan earnings are defined as the average annual earnings during the 36 consecutive months when earnings were highest. The Pension Plan benefits are subject to a ceiling imposed by the Income Tax Act of $1,722 per year for each year of Credited Pensionable Service.

Under an Executive Supplemental Retirement Benefit Plan ("SRP") which was amended in 1994, all officers of the Company are entitled to supplementary pension benefits. In respect of credited service prior to May 1990, the annual pension benefit is equal to 3.33% of final average plan earnings for each of the first 15 years of service with the Company and 2% for each of the next 10 years. These pension benefits are inclusive of benefits payable under the Pension Plan and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to those officers with credited service granted prior to May 1990 under the SRP is 70% of final average plan earnings at the date of retirement, less the amount payable under the Canada Pension Plan. In respect of credited service on and after May 1990, the annual pension benefit is equal to the amount calculated using the formula contained in the Pension Plan without reference to the ceiling imposed by the Income Tax Act referred to above.

Under both the Pension Plan and SRP, a participant will receive the following automatic form of pension:

(a) in respect of credited service prior to January 1, 1990, upon retirement, a monthly pension payable for life with 60% continuing to the participant's surviving spouse; and

(b) in respect of credited service on and after January 1, 1990, upon retirement, a monthly pension as described in (a) above, and for unmarried participants or married participants who have so elected and with spousal consent have waived the automatic form of pension, a monthly pension payable for life with payments to the participant's estate guaranteed for the balance of 10 years if the participant dies within 10 years of retirement.

In lieu of the automatic form of pension, a participant may elect optional forms of pension payment.

Assuming that the executive officers named below remain employed by the Company until age 65 and that the Pension Plan and the SRP remain in force substantially in their present forms, such officers will have approximately the following listed number of years of Credited Pensionable Service: G. W. Watson — 22 years; R. A. M. Young — 14 years; R. J. Reid — 40 years; G. J. Couper — 32 years; and A. J. Epp — 11 years.

The following table sets out estimated annual pension benefits (based on the "joint and 60% survivor" method) payable for credited service under the Pension Plan and the SRP (excluding amounts payable under the Canada Pension Plan) in specified final average plan earnings and years of Credited Pensionable Service classifications:

Final Average Plan Earnings	Years of Credited Pensionable Service					
	15	20	25	30	35	40
$ 200,000	$ 50,000	$ 66,000	$ 83,000	$100,000	$116,000	$133,000
300,000	76,000	101,000	127,000	152,000	178,000	203,000
400,000	102,000	136,000	171,000	205,000	239,000	273,000
500,000	129,000	171,000	214,000	257,000	300,000	343,000
600,000	155,000	206,000	258,000	310,000	361,000	413,000
700,000	181,000	241,000	302,000	362,000	423,000	483,000
800,000	207,000	276,000	346,000	415,000	484,000	553,000
900,000	234,000	311,000	389,000	467,000	545,000	623,000
1,000,000	260,000	346,000	433,000	520,000	606,000	693,000

Note: *Final average plan earnings include base salary and targeted incentive payments under the ICP.*

Report on Executive Compensation by the Human Resources Committee of the Board of Directors

The Human Resources Committee of the Board of Directors (the "Committee") is composed of four directors who are neither officers nor former officers of the Company. The Committee is charged with the mandate described on page 76 of the 1995 Annual Report. Certain of its responsibilities are also set out in Schedule "A" of this Circular. The Committee reports to the Board of Directors (the "Board") all material matters considered and approved by it.

When determining the level of executive compensation, the Committee utilizes data prepared by independent compensation consultants. Competitive compensation data for a comparator group comprised of approximately 25 large Canadian public companies is referenced. These companies are of similar size and complexity to the Company and are representative of the types of organizations with which the Company must compete for its executive officers.

The main objectives of the compensation program for the executive officers of the Company are:

- To attract, retain and appropriately motivate the highly qualified workforce necessary to achieve the Company's annual and longer-term business objectives; and
- To reinforce the commitment of the executive officers to maximize shareholder value.

In order to achieve these objectives, the total compensation program for executive officers has four components, all of which are performance-based:

- Base salary;
- An annual incentive program in the form of cash payments, described above under "Description of Plans — Incentive Compensation Program";
- A long-term equity-based incentive plan, described above under "Description of Plans — Key Employee Stock Incentive Plan"; and
- A long-term, equity-related cash incentive plan, described above under "Description of Plans — Performance Unit Plan".

When determining how the Company's compensation program compares against the competitive compensation data, the Committee considers it appropriate that considerable emphasis should be placed on actual performance achievements as measured against pre-established corporate goals, as well as individual executive officer performance management objectives.

Base Salaries

Executive officers are paid base salaries which are administered within salary ranges established for each position. Due to the fact that executive officers participate in the Company's annual Incentive Compensation Program (the "ICP"), their salaries are not permitted to exceed the mid-point of their salary range. Only when a superior level of performance is achieved under the ICP does total cash compensation, including payments under the ICP, reach the top 25% of the comparator group of companies. If a less than superior level of performance is achieved under the ICP, total cash compensation will be lower.

ICP

The ICP links the annual cash compensation levels and the achievements of annual individual and corporate performance goals by placing a portion of overall cash compensation at risk, to be obtained only if goals are achieved. The payments at risk under the ICP typically represent up to approximately 30% to 40% of the cash compensation (base salary plus ICP) opportunity at the executive officer level. The individual and corporate goals are determined annually in conjunction with the Board's approval of the Company's strategic and operating plans. Quantitative corporate goals include such factors as total shareholder return, return on common equity, return on assets, net income per common share, and operating income. Qualitative corporate goals include developing strategic business plans which will result in future corporate growth and increased shareholder

value, and improving overall operational performance on matters such as reliability, quality of service to customers, safety, environmental compliance, and human resource development to achieve continuous quality and productivity improvement.

Awards under the ICP are payable when the pre-identified individual and corporate performance achievements are judged to have been met at the target level, which is pre-determined by the Committee. If performance exceeds the target level and is judged to be superior, the ICP allows for higher incentive payments. It is difficult to have performance assessed as superior. In 1995, awards to executive officers as a group, reflected the fact that the Company was considered to have exceeded its performance targets, but not at a level judged to have been superior.

Key Employee Stock Incentive Plan

The Company's long-term incentive plan, the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)"), is the third performance-based component of the executive group's total compensation program. KESIP (1995) is intended to reinforce executive officer commitment to the long-term growth in profitability and shareholder value by including stock options in the total compensation program. Unexercised options held by individuals at the time new awards are made to those individuals are not considered; limits are placed on the total shares that can be reserved for issuance under KESIP (1995). The size of the annual stock option awards to individual officers is determined by considering individual performance, level of responsibility, authority and overall importance to the current welfare of the Company, and the degree to which their long-term potential and contribution will be key to the long-term success of the Company. In the case of stock options, executives benefit only if the market value of the stock subject to the option at the time of exercise is greater than that at the time of the award.

Performance Unit Plan

In order to further strengthen the alignment of the executive group's financial interests with those of the shareholders, the Board approved the adoption of a new Performance Unit Plan ("PUP"), effective in 1995. On the same date as the Committee determines the number of stock options to be awarded under the terms of KESIP (1995), it also may determine an equivalent number of units be granted under PUP. Each unit accrues annually a cash amount equal to the dividends paid on a common share in a financial year, provided the Company's total shareholder return is equal to or greater than the average total shareholder return performance of a peer group of companies for such financial year. If the Company's total shareholder return performance is less than that of the peer group index, a lesser cash amount may be determined at the discretion of the Committee. The executive has no right to payment of these cash amounts unless the sum of the amount accrued on a unit plus the market price of a common share on payment date is equal to or greater than the market price of a common share on the award date of a unit and the KESIP (1995) option awarded on the same date as the unit, has been previously exercised. The addition of PUP will tie executive compensation levels directly to the Company's performance in relation to both share price and dividend payments.

Total Compensation

If the corporate and individual executive officer performance targets are met, and assuming stock growth and dividend payment assumptions are correct for the KESIP (1995) and PUP components, it is intended that an average 67% of the total executive officer compensation program relate to the base salary component, 11% to the annual ICP, and 22% to the long-term KESIP (1995) and PUP programs. The more senior the executive officer, the more closely compensation is tied to the actual performance of the Company. Accordingly, a higher proportion of the total compensation package is at risk under the ICP, KESIP (1995) and PUP programs for the Named Executive Officers.

Compensation of the Chief Executive Officer

Mr. Watson's compensation program has the same components as those described for the other members of the executive officer group: base salary, the annual ICP and the long-term KESIP (1995) and PUP programs. Mr. Watson's compensation is established with reference to the same

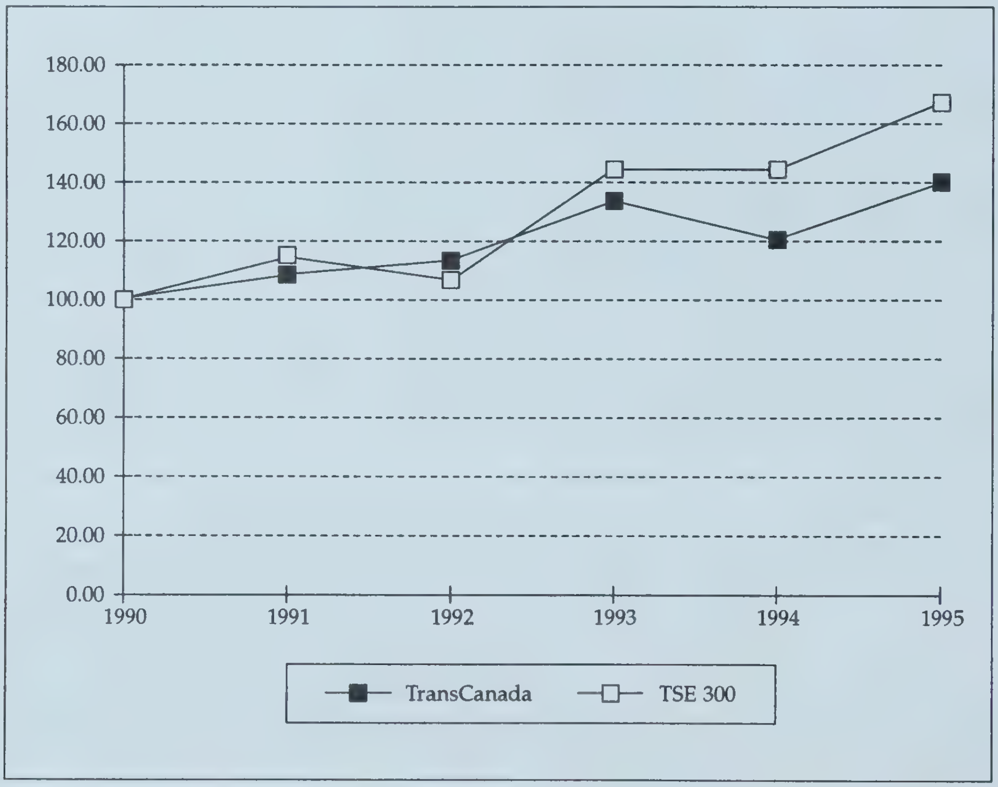
comparator group described above. The Committee makes recommendations to the Board regarding Mr. Watson's compensation on the same performance-related basis as for the other executive officers. In comparison to the other executive officers, when determining Mr. Watson's compensation greater emphasis is placed on the performance of the Company as measured against the pre-established quantitative and qualitative goals. No specific weighting is assigned to these goals when recommending a base salary, KESIP (1995) award and PUP award for Mr. Watson. Under the ICP, 60% of his award is directly related to the quantitative and qualitative corporate achievements and 40% to his individual achievements. In recognition of his contribution to the Company's successful performance during 1995, Mr. Watson's annual base salary was set at $500,000, an ICP payment of $175,000 was approved, awards totalling 94,992 stock options were made under KESIP (1995) and 94,992 units were granted under PUP with an accrued potential future cash value of $30,992 for 1995.

Submitted by the Human Resources Committee of the Board of Directors:

A. R. Taylor (Chairman)
J. V. R. Cyr
T. E. Kierans
H. G. Schaefer

Performance Graph

The following chart compares TransCanada's five-year cumulative total shareholder return to the TSE 300 composite index, assuming reinvestment of dividends and considering a $100 investment on December 31, 1990 in TransCanada's common shares.



	1990	1991	1992	1993	1994	1995	Compound Annual Growth
TransCanada	100.0	107.4	112.9	134.7	120.5	140.3	7.01%
TSE 300	100.0	112.0	110.4	146.3	146.1	167.3	10.84%

3. Appointment of Auditors

The Board of Directors recommends that KPMG Peat Marwick Thorne, Chartered Accountants, be reappointed as the Company's auditors to hold office until the close of the next annual meeting. This firm has served as the auditors of the Company since 1956.

Representatives of KPMG Peat Marwick Thorne will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

Other Information

Corporate Governance

TransCanada is committed to a high standard of corporate governance. The Company's principal objective in directing and managing its business and affairs is to enhance shareholder value. Effective corporate governance is an important factor in the pursuit of that objective. It establishes the processes and structures which define the division of authority, responsibility, and accountability between management and the Board of Directors.

In December 1994 The Toronto Stock Exchange Committee on Corporate Governance in Canada issued a series of guidelines for effective corporate governance (the "TSE Report"). The guidelines address matters such as the constitution and independence of corporate boards, the functions to be performed by boards and their committees and the effectiveness and education of board members. The Toronto Stock Exchange has now adopted, as a listing requirement, the disclosure by each listed corporation of its approach to corporate governance with reference to the guidelines contained in the TSE Report.

The TSE Report dealt extensively with the make-up and independence of corporate boards. An "unrelated" director, under the TSE Report, is a director who is free from any interest and any business or other relationship which could, or could reasonably be perceived to, materially interfere with the director's ability to act in the best interests of the corporation, other than interests arising from shareholdings. In defining an unrelated director, the TSE Report placed emphasis on the ability of a director to exercise objective judgment, independent of management. The TSE Report also made an informal distinction between inside and outside directors. The TSE Report considers an inside director to be a director who is an officer or employee of the corporation or any of its affiliates.

The Board of Directors believes that 10 of TransCanada's 12 existing directors are both unrelated and outside directors and that 11 of the 13 nominees for election to the Board at the Meeting are unrelated and outside directors. Two members of TransCanada's Board of Directors, L. Y. Fortier and R. E. Dineen Jr., are partners in law firms which provide legal advice from time to time to the Company. One other director, The Hon. D. S. Macdonald, is counsel to a law firm which also provides legal advice to the Company. In the opinion of each of those directors, the amounts of money paid by the Company to their respective firms for legal advice in relation to the total income of those firms is immaterial and has not affected the ability of those directors to act in the best interests of the Company. The Board considers each of those directors to be unrelated. Mr. Watson (TransCanada's President and Chief Executive Officer) and Mr. Maier (TransCanada's former CEO and current Chairman of the Board) are the only two Board members who the Board considers to be related directors. Mr. Watson is the only Board member who would be considered to be an inside, or "management" director.

The disclosure with respect to the guidelines is set out in tabular form and attached to this Proxy Circular as Schedule "A".

Directors' and Officers' Liability Insurance

The Company maintains Directors' and Officers' Liability Insurance with policy limits of U.S. $100 million in the aggregate, subject to a deductible in respect of corporate reimbursement of U.S. $250,000 for

each loss. Generally, under this insurance the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Major exclusions from coverage include claims arising from illegal acts, those acts which result in personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions) and claims brought by a director or officer against the Company or by the Company against a director or officer except for shareholder derivative actions. For the year ended December 31, 1995, the total annual premium in respect of such insurance was Cdn. $364,032 which was paid entirely by the Company. Of this amount, an estimated $118,064 was paid in respect of directors as a group and $245,968 was paid in respect of officers as a group.

Shareholder Proposals

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 1997 annual meeting of holders of common shares of the Company (expected to be held in April 1997) must be received by the Corporate Secretary of the Company on or before the close of business on January 24, 1997.

Directors' Approval

The contents of this Circular and the sending of it to each shareholder entitled to receive notice of the Meeting, to each director, to the auditors of the Company and to the appropriate governmental agencies, have been approved by the Board of Directors of the Company.

Alison T. Love

Alison T. Love
Corporate Secretary and
Associate General Counsel

Dated at Calgary, Alberta
March 5, 1996

SCHEDULE "A"

TSE Corporate Governance Committee recommendation	Does TransCanada Align?	TransCanada's practice as it relates to the TSE recommendation
1. Board should explicitly assume responsibility for stewardship of the corporation, and specifically for:		
a. adoption of a strategic planning process	Yes	In TransCanada, strategic planning is an ongoing process — it would be more accurate to describe it as continuously thinking strategically. The Company holds one strategic planning session each year in which members of the Board and senior management personnel participate jointly. The product of that session is a business plan developed by management and supported by the Board.
b. identification of principal risks, and implementing risk-managing systems	Yes	TransCanada's Board monitors the systems that have been put in place to address the risks identified by the Company.
c. succession planning and monitoring senior management	Yes	The Human Resources Committee reviews and reports to the Board on management resources and succession planning matters at least once each year. The CEO has a written responsibility to report regularly to the Board on succession candidate development. TransCanada uses a performance management system to monitor the performance of senior management.
d. communications policy	Yes	The Board monitors the structures that are in place to ensure effective communication between TransCanada, its stakeholders and the public.
e. integrity of internal control and management information systems	Yes	The Audit Committee of the Board has, as one of its mandates, the responsibility to review the Company's internal control procedures to determine the effectiveness of the Company's internal controls in a number of areas including information systems, physical disasters and financial risk management. The Committee reports thereon to the Board.
2. Majority of directors should be "unrelated" (free from conflicting interest)	Yes	G. W. Watson (CEO) and G. J. Maier (Chairman of the Board and former CEO) are the only Board members who are related.

TSE Corporate Governance Committee recommendation	Does TransCanada Align?	TransCanada's practice as it relates to the TSE recommendation
3. Disclose for each director whether he or she is related, and how that conclusion was reached.	Yes	G. W. Watson (Related) is CEO and President of TransCanada. G. J. Maier (Related) is paid a yearly fee in respect of his duties as Chairman and is a former CEO and President of TransCanada. For the remainder of the proposed directors, none of them or their associates have: • worked for TransCanada • material contracts with TransCanada • received remuneration from TransCanada in excess of directors' fees. R. E. Dineen, Jr. — Unrelated W. Dobson — Unrelated L. Y. Fortier — Unrelated K. L. Hawkins — Unrelated T. E. Kierans — Unrelated Hon. D. S. Macdonald — Unrelated J. R. Paul — Unrelated H. G. Schaefer — Unrelated A. R. Taylor — Unrelated J. D. Thompson — Unrelated M. K. Witte — Unrelated
4. a. Appoint a Committee responsible for proposing nominees to the Board and assessment of directors	Yes	a. The Governance Committee has the mandate to: • recommend candidates for nomination as directors of the Company • annually review credentials of nominees for re-election • annually assess the performance of individual directors, and recommend action, as appropriate, to the Board. b. An annual directors' questionnaire acts as an assessment by each director to determine, among other things, that issues of corporate governance are raised to the entire Board and to management.
b. That Committee should be composed exclusively of outside directors, the majority of whom are unrelated	Yes	All of the 6 members of the Governance Committee are outside directors, only Mr. Maier is considered a related director.

TSE Corporate Governance Committee recommendation	Does TransCanada Align?	TransCanada's practice as it relates to the TSE recommendation
5. Implement a process for assessing the effectiveness of the Board, its Committees and individual directors	Yes	The Governance Committee is mandated to: • monitor the quality of the relationship between management and the Board and recommend improvements if required • annually assess the effectiveness of the Board, its Committees and individual directors and report its findings and recommended action to the full Board • Additionally, (a) at least one Board meeting per year is scheduled to discuss governance issues without management present; and (b) the Chairman endeavours to meet privately (annually) with each director to receive his/her views regarding governance issues in the Company.
6. Provide orientation and education programs for new directors	Yes	The Corporate Secretary prepares a "Director's Manual" for new and existing directors, which is updated from time to time. Informal presentations are made to the Board following regular scheduled meetings, on different aspects of TransCanada's business.
7. Consider reducing size of Board, with a view to improving effectiveness	Yes (12 current directors)	A board must have enough directors to carry out its duties efficiently, while presenting a diversity of views and experience. The Board reviews the contributions of the directors, and considers whether the current size of the Board promotes effectiveness and efficiency. The size of the Board was reduced in 1994 from 14 directors to 12 although the Board decided, in 1995, that the size of the Board should be increased to 13 and accordingly, 13 nominees have been proposed for election to the Board at the 1996 Annual Meeting. The Board intends to annually assess the size of the Board in relation to the needs of the Company.
8. Review compensation of directors in light of risks and responsibilities	Yes	The Governance Committee is mandated to annually review and recommend to the Board for approval, the remuneration of directors. The Committee considers time commitment, comparative fees and responsibilities of directors in determining remuneration.

TSE Corporate Governance Committee recommendation	Does TransCanada Align?	TransCanada's practice as it relates to the TSE recommendation
9. a. Committees should generally be composed of outside directors	Yes	Except for the Executive Committee, all of TransCanada's committees of the Board are composed solely of outside, or non-management directors. G. W. Watson is a member of the Executive Committee.
b. Majority of Committee members should be unrelated	Yes	
10. Appoint a Committee responsible for approach to corporate governance issues	Yes	The Governance Committee is mandated to monitor, assess and report on Board governance of TransCanada. Included in its mandate is the responsibility to: • review the policies and procedures of the Board regarding governance matters • recommend allocation of directors to the various committees • undertake "such other initiatives as are needed to help the Board deliver preeminent corporate governance".
11. a. Define limits to management's responsibilities by developing mandates for:		
(i) the Board	Yes	In 1995 the Board considered a "Position Description" for the Board and expects to finalize the Position Description in early 1996. That document covers such matters as the responsibilities, authorities and accountabilities of the Board. Any responsibility which is not delegated to senior management or a Board committee remains with the full Board.
(ii) the CEO	Yes	The Board has approved the CEO's Position Profile. It sets out the CEO's function and key responsibilities.
b. Board should approve CEO's corporate objectives	Yes	The Human Resources Committee approves the CEO's written objectives on an annual basis which are then reviewed by the full Board. These objectives include corporate operational, economic and personal qualitative objectives.

TSE Corporate Governance Committee recommendation	Does TransCanada Align?	TransCanada's practice as it relates to the TSE recommendation
12. Establish procedures to enable the Board to function independently of management	Yes	The Governance Committee seeks to ensure that the Board functions independently of management. The Board meets independently of management where needed. In 1995 the Board held one meeting independent of management to discuss issues relating to governance. The Board plans to continue to meet from time to time to discuss governance issues as required.
13. a. Establish an Audit Committee with a specifically defined mandate	Yes	TransCanada's Audit and Environmental Committee is generally mandated to: • monitor audit functions and the preparation of financial statements • approve the release by the Company of quarterly and annual financial results • evaluate the Company's environmental practices and procedures and advise and make recommendations to the Board on matters relating to the environment • determine that management has established an effective system of internal controls • review issues relating to legal and regulatory responsibilities to determine compliance • meet with the outside auditors independently of management • meet with the Director, Internal Audit and the Director, Environmental Affairs, in each case independently of other management.
b. All members of the Audit Committee should be non-management directors	Yes	
14. Implement a system to enable individual directors to engage outside advisers, at corporation's expense	Yes	Individual directors may engage outside advisers with the authorization of the Chairman of the Board and the CEO.

The Management Proxy Circular dated March 10, 1995 for the Company's last annual meeting has been filed with the securities commissions or similar authorities in Canada. The Annual Information Form of the Company for the year ended December 31, 1995, expected to be dated March 21, 1996, will be filed prior to March 30, 1996 with securities commissions or similar authorities in Canada, and under cover of Form 40-F with the U.S. Securities and Exchange Commission. The 1995 Management Proxy Circular is available and the Annual Information Form for the year ended December 31, 1995 will be available on or about April 15, 1996 (without charge to holders of common shares of the Company) upon request to the Corporate Secretary and Associate General Counsel, TransCanada PipeLines Limited, P.O. Box 1000, Station "M", Calgary, Alberta T2P 4K5.

Canadian Mail Service Interruption: If there is a mail service interruption in Canada prior to mailing by a shareholder of a completed proxy to TransCanada's transfer agent, Montreal Trust, it is recommended that the shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of Montreal Trust:

Alberta
530 - 8th Avenue S.W.
Calgary

10200 - 102nd Avenue
Edmonton

British Columbia
510 Burrard Street
Vancouver

100 - 747 Fort Street
Victoria

Saskatchewan
1778 Scarth Street
Regina

201 Second Avenue, S.
Saskatoon

Manitoba
221 Portage Avenue
Winnipeg

Ontario
Commerce Place,
21 King Street W.
Hamilton

171 Queens Avenue
London

96 Sparks Street
Ottawa

151 Front Street, W.
8th Floor
Toronto

Québec
Place Montréal Trust
1800, avenue McGill College
6th Floor
Montreal

475, rue Saint-Amable
Québec

New Brunswick
53 King Street
Saint John

Nova Scotia
1690 Hollis Street
Halifax

Prince Edward Island
c/o 143 Grafton Street
Charlottetown

Newfoundland
331 Water Street
St. John's

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TransCanada PipeLines

RESPONSIBLE ENVIRONMENTAL MANAGEMENT:

What we do

A message from our chairman

Everywhere I go, people ask me about TransCanada's commitment to the environment. They want to know what we do to protect the air we breathe, wildlife on our right-of-way and land that houses our facilities.

I've always been very proud that I can answer, "We do everything we can." Whether we're doing business in Canada, the United States or overseas, communities can rely on us to be an environmentally responsible corporation. We've employed environmental specialists since 1974. Our people have developed an environmental policy endorsed by our board of directors and supported by environmental management systems.

Today, our environmental department numbers 12. During periods of construction, many additional, temporary environmental inspectors are added to staff. Regional coordinators implement environmental plans for their areas. Our corporate Environmental Review Committee assesses the effectiveness of our programs and suggests improvements.

Environmental awareness always forms a part of our decision-making process. Whether we're deciding the most appropriate way to handle a pipeline water crossing, or how to reduce noise emissions at a power generation or compressor station, responsible environmental management is our guiding principle.

I invite you to read on to learn more about our policies and programs. I am proud to say that TransCanada people are very aware of the importance of responsible environmental management in the world today.

G.J. Maier

Gerald J. Maier, P.Eng., F.C.A.E.
Chairman

TransCanada PipeLines: AN OVERVIEW

TransCanada PipeLines is one of North America's leading natural gas transmission companies. Our 13 600-kilometre system – with 56 compressor stations along the route – travels from the Alberta/Saskatchewan border to the Québec/Vermont border and is linked to several U.S. and Canadian pipelines. The company's focus is to be a recognized global enterprise excelling in energy transmission, electric power generation, energy marketing and other infrastructure projects.

Our primary business is the construction, operation and maintenance of pipeline and gas compression facilities. Each of these tasks demands a high degree of environmental commitment. At any time, we are concerned with keeping rights-of-way clear, safely disposing of hazardous wastes and assessing air and noise emissions at our compressor stations.

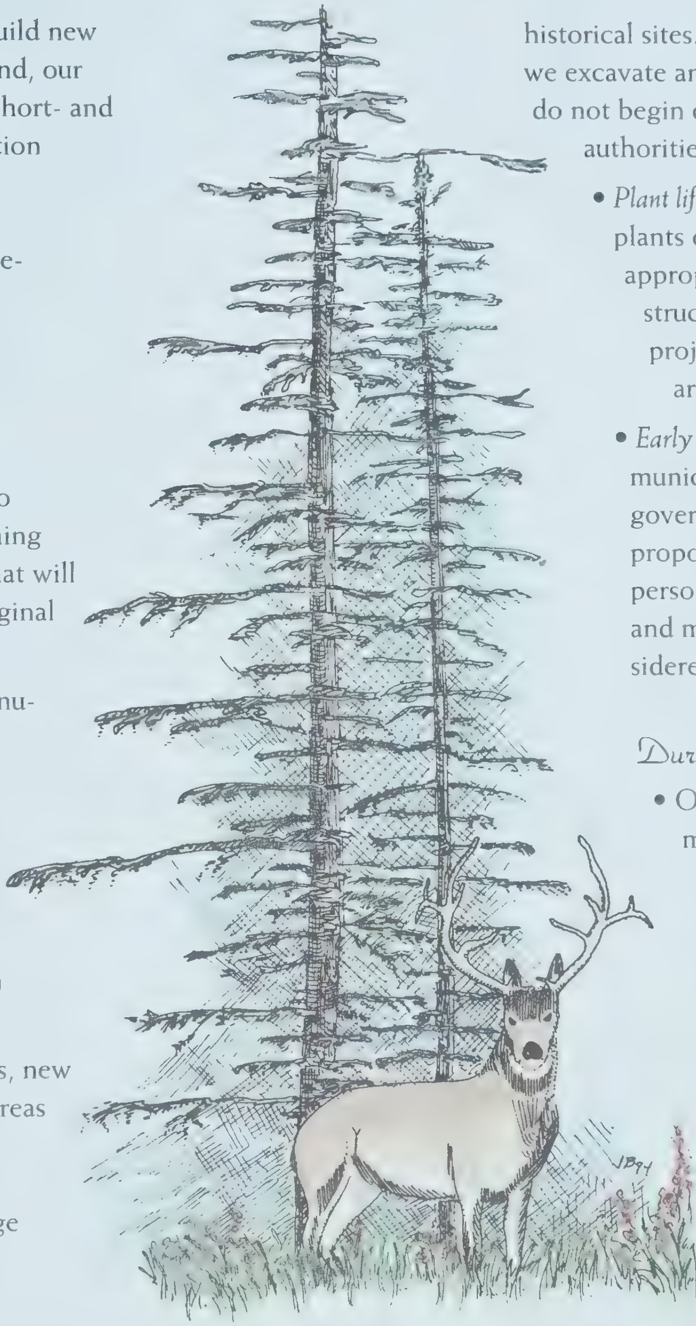
Whatever the business challenge, TransCanada has an environmental policy and procedures in place to respond. We apply our high standards to all aspects of our operations and strongly encourage our subsidiaries and proposed projects to have similar standards in place. In this brochure, we highlight our environmental programs in these areas:

- construction
- maintenance and operations
- waste management
- environmental audits
- air emissions
- noise management
- facilities monitoring
- research/special projects
- vegetation management
- communications

CONSTRUCTION

While it is impossible to build new pipelines without disturbing the land, our overriding goal is to mitigate any short- and long-term impacts of our construction on the environment.

To achieve this goal, we adhere to a stringent series of procedures before, during and after construction.



Pre-construction planning

- We prepare environmental and socio-economic impact studies to determine the best route and timing for construction and measures that will return the land as close to its original state as possible.
- Construction practices are continuously reassessed to respond to ecosystem sensitivities.
- *Agriculture* – we discuss our plans with landowners so arrangements can be made for livestock relocation, soil conservation and the installation of proper drainage.
- *Forestry* – to minimize timber loss, new rights-of-way attempt to avoid areas of high forest value. Any timber that must be removed is piled along the right-of-way for salvage by the landowner or a timber company.
- *Wetlands* – TransCanada tries to avoid wetlands during pipeline routing and construction. If this is not possible, we have special procedures to protect waterfowl nesting and breeding habitat.
- *Wildlife* – whenever possible, we do not build during times of migration, breeding or nesting in areas of sensitive habitat.
- *Heritage sites* – by doing a heritage resource analysis, TransCanada makes every effort to avoid disrupting historical sites. If we can't alter our route, we excavate and preserve any artifacts. We do not begin construction until local authorities give their approval.
- *Plant life* – we protect sensitive plants or specimens by outlining appropriate procedures in construction documents before the project begins and ensuring they are followed.
- *Early public notification* – we communicate with local residents and government agencies about our proposed construction through personal letters, newspaper ads and meetings. Their input is considered in our planning decisions.

During construction

- Our contracts include environmental specifications for construction contractors.
- We brief construction personnel on our protection programs.
- Independent, on-site inspectors ensure that environmental specifications are met.
- We develop and implement practices for areas of special concern, such as water crossings, often in consultation with our regulators.

Post-construction monitoring

- We monitor rights-of-way for at least two complete growing seasons after construction to ensure that restorative procedures are effective and we resolve unanticipated impacts.

MAINTENANCE AND OPERATIONS

Once pipeline construction and compressor installations are completed, TransCanada has an ongoing responsibility to ensure that its facilities – and those of its affiliated pipelines – are operated and maintained in an environmentally appropriate manner. In particular, we must ensure that all facilities comply with the company's environmental policy and applicable government regulations.

Maintenance

Our system is inspected regularly. Maintenance may include replacing pipe with thicker-walled or metallurgically superior pipe, hydrostatic testing to assess pipe integrity or ensuring that pipe has sufficient ground cover. We have several policies to ensure inspections are conducted in an environmentally responsible manner. If pipe is uncovered and/or replaced during inspection, land contours are restored, banks are stabilized and erosion control measures are taken. Areas are then seeded and fertilized as required (except wetlands). If in-stream work is required, a detailed sediment control plan is developed prior to construction and company and government guidelines are followed. As well, we follow standard construction procedures for protecting fish habitat.

Operations

TransCanada has developed environmental standards and guidelines for several areas, including: waste management at our facilities; air and noise emissions at compressor facilities; facilities monitoring; and vegetation management on the right-of-way. These guidelines are described in detail over the next few pages.

WASTE MANAGEMENT

TransCanada's comprehensive waste management program ensures that employees and contractors act responsibly and comply with all applicable provincial and federal regulations when dealing with wastes and hazardous materials.

During construction

- Our contractors must provide a daily garbage detail to keep the right-of-way clear of coating drums, spools, skids, paper and other debris.
- Storage containers are situated so that potential spills do not come in contact with watercourses.

During operations

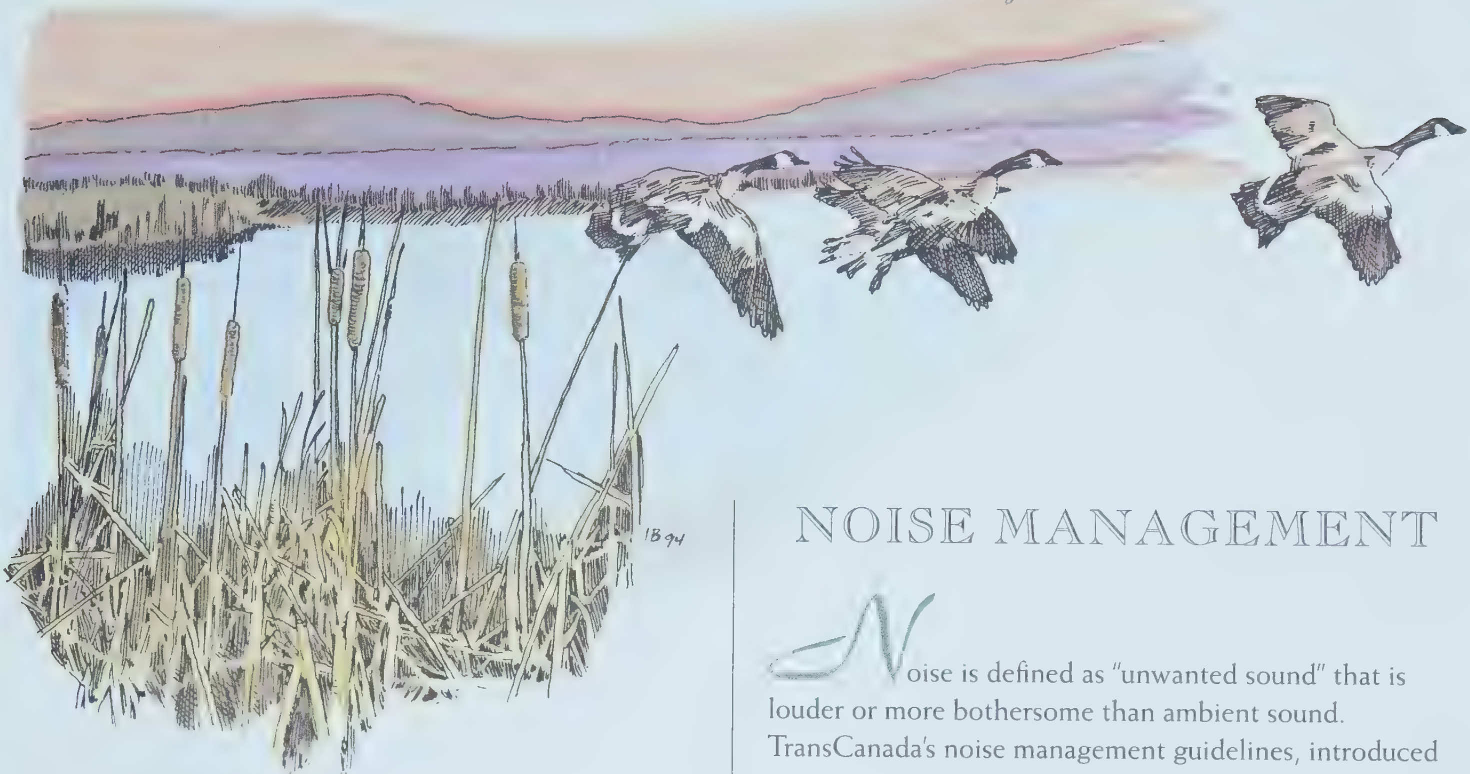
- Waste assessments are used as a basis for initiatives to reduce, reuse and recycle.
- Oils, solvents and greases are moved, stored and handled as recommended by suppliers in compliance with government regulations.
- Used oils are stored in appropriate drums or tanks until shipment to a recycling centre is arranged.
- All wastes are classified to ensure that they are managed appropriately.
- Wastes are stored in compliance with all corporate, industry and government regulations until there is sufficient volume to dispose of them economically.
- When disposing of wastes, different waste streams are not mixed and only authorized landfills are used.
- Routine inspections are performed to detect leaks at storage facilities.

ENVIRONMENTAL AUDIT PROGRAM

TransCanada's ongoing environmental audit program for our mainline gas transmission system, affiliated pipelines and proposed investments around the world has several functions. It identifies the legislative and corporate policies we must observe. Audits also help us to identify potential problem areas and enhance the environmental awareness of our employees. The primary goal of our program is to audit all major mainline facilities over three-year cycles, while providing environmental assessments for significant proposed acquisitions or divestitures.

To ensure a consistent and comprehensive approach, our audits assess seven areas:

- *hazardous materials;*
- *waste management;*
- *chemical storage and spill prevention;*
- *water supply and discharge;*
- *transportation of dangerous goods;*
- *vegetation management and right-of-way maintenance; and*
- *environmental stewardship.*



AIR EMISSIONS

TransCanada's air emissions program has two major goals: to meet air management guidelines set out by the federal government and to address air quality at both new and existing facilities. For compressor additions, we examine and assess air quality to ensure that the equipment allows us to meet the federal requirements. We assess existing facilities by evaluating air quality at and around compressor stations. Additionally, we monitor and control dust emissions during construction and operations.

- Where possible we install engines that reduce oxides of nitrogen emissions.
- We set annual targets to reduce methane emissions from our facilities. Our performance in reducing methane emissions has improved every year since 1991 and we continue to work towards further improvements.
- We evaluate and recommend measures such as eliminating or recovering gas vented from compressors and installing compressor starters that do not use natural gas to reduce methane emissions.
- We are committed over the long term to systematically reducing the level of emissions from our facilities.

NOISE MANAGEMENT

Noise is defined as "unwanted sound" that is louder or more bothersome than ambient sound. TransCanada's noise management guidelines, introduced in 1993, cover four areas: existing compressor units, construction of additional units at existing stations, construction of future stations and occupational noise.

Because provincial and federal noise management regulations differ, our guidelines bring a uniform standard of noise management to our facilities. The guidelines are supported by a detailed procedure for responding to public and employee noise complaints. Noise data is tracked using a database.

FACILITIES MONITORING

TransCanada has a systematic monitoring process in place to ensure that our facilities are safe, secure and environmentally sound. A key element of this process is weekly helicopter inspections. Environmental Affairs staff meet regularly with TransCanada's pilots to discuss environmental issues and potential problem areas on the right-of-way. This includes follow-up after environmental audits, waste management monitoring and post-construction monitoring. For example, pilots are trained to identify from the air potential environmental impacts at water crossings which could adversely affect fisheries and fish habitat.

RESEARCH AND SPECIAL PROJECTS

TransCanada participates in research projects that we believe will improve our ability to manage the impacts and costs of our construction and operations. Here are two examples:

Nipigon Fish Habitat Project

In 1992, TransCanada completed a significant fish habitat enhancement project in Ontario's Nipigon River. Following installation of a pipeline in the riverbed, TransCanada created spawning shoals, nursery and feeding habitats using innovative techniques with input from government agencies. The Nipigon River is a world-class brook trout river, so the project received high public profile and stringent scrutiny by government agencies and native peoples. Monitoring later showed that the fish are using the shoals and the project has resulted in a net gain in fish habitat.

Sediment transport assessment

To help determine the potential impact of pipeline installation on aquatic ecosystems when water is not diverted (this is known as a "wet crossing"), TransCanada and a consultant are researching how sediment moves and settles. The method under review would compile and analyze geotechnical data to assess the sediment movement patterns during the initial evaluation of a river crossing site.

PURCHASING – ENVIRONMENTAL CONSIDERATIONS

TransCanada spends millions of dollars per year on pipe, valves, fittings, compressor units, furniture, electrical equipment, cars and trucks, stationery and many other materials. To support our commitment to the environment, we introduced a purchasing environmental policy in 1993.

The policy ensures that:

- *All purchasing decisions affecting the environment fully consider current and potential environmental effects.*
- *Purchasing standards meet or exceed governmental or community environmental standards in view of economic and technical considerations and customer service.*

VEGETATION MANAGEMENT

The primary goal of TransCanada's vegetation management strategy is to control unwanted vegetation along our right-of-way and at stations by using non-chemical measures. We supplement these measures by applying herbicides with low toxicity. We also promote the growth of desirable vegetation on rights-of-way and at stations to prevent environmental problems – such as erosion – from developing, and to improve wildlife habitat and aesthetics.

Since vegetation, soils and climate vary greatly across our system, our program includes different strategies for different regions. Our program guides employees across Canada to:

- determine appropriate vegetation to maintain adequate cover;
- recognize environmentally sensitive areas and environmental constraints on activities;
- identify appropriate practices to be applied; and
- assess the potential impacts of vegetation management techniques.

COMMUNICATIONS

TransCanada has a responsibility to make employees and the public aware of our environmental programs and policies.

By communicating with employees, through presentations and publications, we can keep them informed about ever-changing environmental regulations and procedures, obtain their feedback on our programs and improve overall environmental management practices. Our Environmental Review Committee, comprised of head office, field and subsidiary employees, is vigilant in this area. It reviews and monitors our environmental practices and coordinates environmental communications to staff.

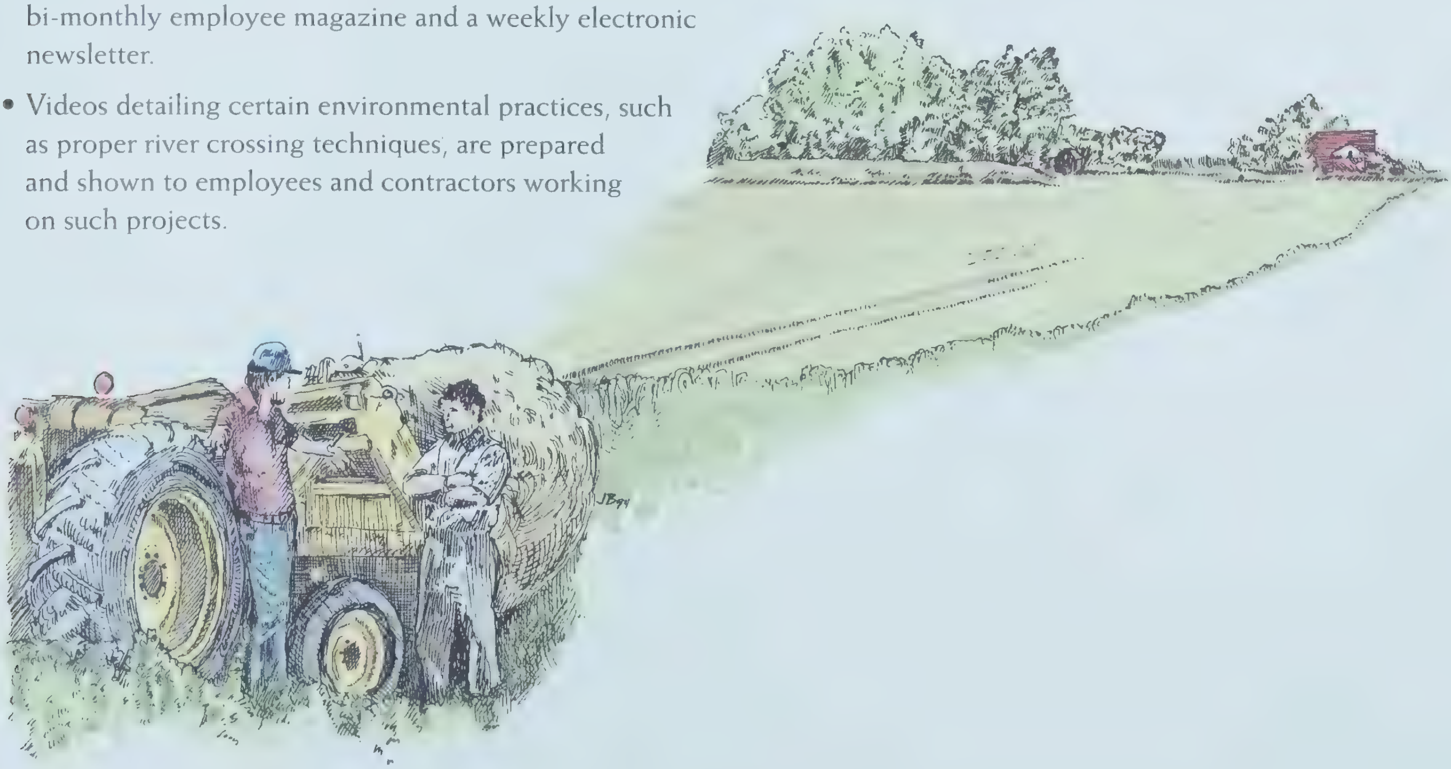
We are also committed to communicating with the communities affected by our construction and operations. We use many methods to keep them aware of our activities, including personal letters, newspaper ads and local meetings.

Employee communications

- Booklets outlining environmental strategies and guidelines, for areas such as vegetation management and noise emissions, are prepared and distributed to applicable staff.
- Environmental articles appear regularly in the company's bi-monthly employee magazine and a weekly electronic newsletter.
- Videos detailing certain environmental practices, such as proper river crossing techniques, are prepared and shown to employees and contractors working on such projects.
- Posters and bulletins with environmental messages are prepared regularly and posted at TransCanada facilities.

Public communications

- An early public notification program is set in motion prior to construction (see description on page 2).
- Employees regularly give presentations and publications to government officials so they are aware of our activities, environmental policies and programs.
- TransCanada's land agents keep in regular contact with the landowners along our right-of-way.
- Signage across the system advises of pipeline locations.
- Company displays focusing on technology, the environment or public safety are presented at local exhibitions and trade shows.

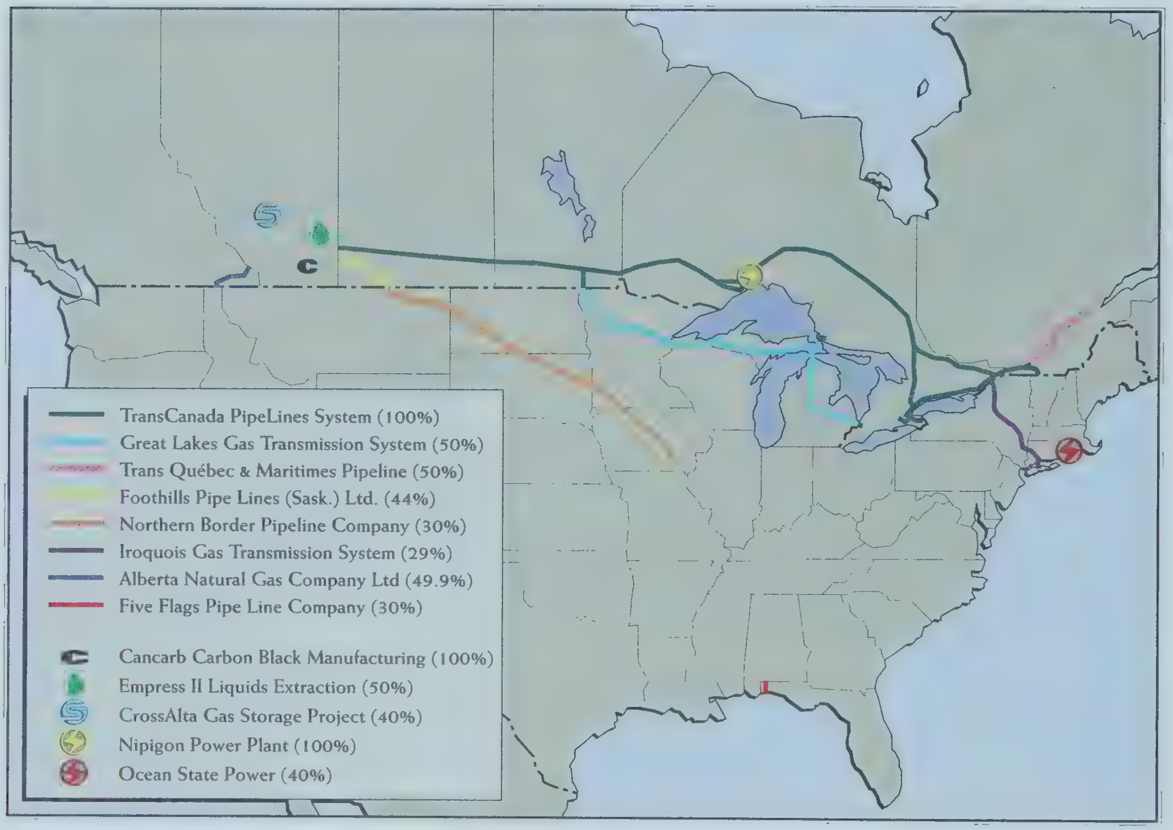


ENVIRONMENTAL POLICY

The board of directors, management and employees of TransCanada PipeLines Limited will maintain their commitment to the protection of the environment.

If you have any questions about the information contained in this brochure, please call our Environmental Affairs Department at (403) 267-8765.

TransCanada PipeLines and Affiliated Businesses



TransCanada PipeLines

TransCanada PipeLines Limited
P.O. Box 1000, Station M
Calgary, Alberta T2P 4K5

PRINTED IN CANADA

TRANSCANADA PIPELINES

NOTICE OF ANNUAL MEETING

MANAGEMENT PROXY CIRCULAR

ANNUAL MEETING

APRIL 30, 1990

TransCanada PipeLines Limited

EXECUTIVE OFFICE:

SUITE 5400, COMMERCE COURT WEST
TORONTO, ONTARIO
CANADA M5L 1C2

NOTICE OF ANNUAL MEETING

Notice is given that the annual meeting (the "Meeting") of the common shareholders of TransCanada PipeLines Limited will be held in the West Ballroom in the Westin Hotel, Two Lombard Place, Winnipeg, Manitoba, on Monday, April 30, 1990 at 10:30 a.m. (Winnipeg time), for the following purposes:

(i) to receive the 1989 Directors' Report, the 1989 Consolidated Financial Statements and the Auditors' Report thereon;

(ii) to elect directors to serve for the ensuing year;

(iii) to appoint auditors to hold office until the close of the next annual meeting; and

(iv) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of TransCanada common shares are invited to attend the Meeting. Only shareholders of record at the close of business on March 16, 1990 will be entitled to vote at the Meeting except to the extent that a person has transferred any common shares of the Company after that date and the new holder of such shares establishes proper ownership and requests not later than 10 days before the Meeting to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting whether or not they are able to attend personally. To be effective, proxies must be received before 12:00 noon (Toronto time) on April 26, 1990 by Montreal Trust Company of Canada, Stock Transfer Department, 66 Temperance Street, Toronto, Ontario, Canada M5H 1Y7 or be presented at the Meeting.

The 1989 Annual Report, a Management Proxy Circular and the form of proxy accompany this Notice of Meeting.

Dated at Toronto, Ontario, March 20, 1990.

By Order of the Board of Directors,

R. F. SIM
Vice-President and Corporate Secretary

TransCanada PipeLines Limited

EXECUTIVE OFFICE:

SUITE 5400, COMMERCE COURT WEST
TORONTO, ONTARIO
CANADA M5L 1C2

MANAGEMENT PROXY CIRCULAR

GENERAL

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by and on behalf of the management and the Board of Directors (the "Board of Directors") of TransCanada PipeLines Limited (the "Company" or "TCPL") to be used at the annual meeting and at any adjournment thereof (the "Meeting") of common shareholders of the Company to be held in Winnipeg, Manitoba on Monday, April 30, 1990, at 10:30 a.m. (Winnipeg time), for the purposes set out in the accompanying Notice of Annual Meeting ("Notice of Meeting").

It is anticipated that copies of this Circular and form of proxy will be first distributed to shareholders on or before March 29, 1990. The cost of soliciting proxies will be borne by the Company. While most proxies will be solicited by mail only, some shareholders may also be approached by Company employees personally or by telephone. In addition, the Company will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of shares registered in the names of such brokers, custodians, nominees and fiduciaries.

Unless otherwise stated, the information contained in this Circular is given as of March 16, 1990 and all dollar amounts set forth herein are in Canadian dollars.

RECORD DATE FOR NOTICE OF MEETING AND PROVISIONS RELATING TO VOTING

The Board of Directors has fixed March 16, 1990 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share of the Company shown as registered in his name in the list of shareholders prepared as of the close of business on the record date except to the extent that a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership and requests the Vice-President and Corporate Secretary of the Company, not later than the close of business on April 20, 1990, to include his name in the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 66 Temperance Street, Toronto, Ontario and will be available for inspection at the Meeting.

APPOINTMENT OF PROXY HOLDERS

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 12:00 noon (Toronto time) on April 26, 1990, or must present a properly executed proxy at the Meeting. All shares represented by a properly executed proxy will be voted for or against or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted for the election of the persons nominated for election as directors and for the appointment of Peat Marwick Thorne, Chartered Accountants, as auditors, in each case as referred to in the Circular.

The enclosed form of proxy, when properly executed, confers discretionary authority on the persons named therein to vote on any amendment to matters identified in the Notice of Meeting and on any other matter properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted in the discretion of the persons named therein. The persons named in the form of proxy are officers of the Company.

REVOCABILITY OF PROXIES

A shareholder may revoke a proxy by depositing an instrument in writing executed by him or his attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of the Company, 530 Eighth Avenue S.W., Calgary, Alberta T2P 3V6 at any time up to and including the last business day preceding the day of the Meeting, or with the chairman of the Meeting on the day of the Meeting, or in any other manner permitted by law.

VOTING SHARES AND PRINCIPAL SHAREHOLDERS

The number of outstanding common shares of the Company entitled to be voted at the Meeting is 153,053,071. Such shares are the only class of the Company's shares entitled to be voted at the Meeting.

The following table sets out information concerning the only persons or companies who or which, to the knowledge of the directors or officers of the Company, beneficially own, directly or indirectly, or exercise control or direction over, more than 5% of the outstanding common shares of the Company:

Title of Class	Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percentage of Class
common	BCE Inc. ("BCE") 2000 McGill College Avenue Suite 2100 Montreal, Quebec H3A 3H7	74,780,675 shares Sole voting and dispositive power	48.9 %
common	Caisse de dépôt et placement du Québec 1981 McGill College Avenue Montreal, Quebec H3A 3C7	8,630,143 shares Sole voting and dispositive power	5.6 %

FINANCIAL STATEMENTS

The 1989 Directors' Report, the 1989 Consolidated Financial Statements of the Company and the Auditors' Report thereon will be placed before the Meeting.

ELECTION OF DIRECTORS

The Board of Directors consists of 14 directors. Except for Messrs. Kierans and Stollery, the nominees whose names are set forth below are currently directors of the Company. Mr. Cameron, a current director, retired from the office of President and Chief Executive Officer, Pipeline Division of the Company in May 1989 and, in accordance with Company policy, will not be standing for re-election. Mr. Clarry, a current director, has reached the age limit for service on the Board of Directors and is therefore not eligible to stand for re-election. Each nominee has established his eligibility and willingness to serve if elected. The persons named in the form of proxy to act and vote on behalf of shareholders are officers of the Company and intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the proxy form to withhold such vote. Should any nominee become unable or unwilling to stand for election, the persons named in the form of proxy intend to vote for any other person recommended by management of the Company. Each director elected will hold office until the next annual meeting or until his successor is duly elected or appointed.

INFORMATION CONCERNING THE DIRECTORS

GENERAL INFORMATION

Set forth below are the names of the 14 nominees, their municipalities of residence, their ages, all positions and offices with the Company and its significant affiliates held by them, their principal occupations or employments during the past five years, the years from which they have continuously served as directors of the Company and the number of equity securities of the Company and of BCE owned by them or over which they exercise control or direction.

Nominee for Election as Director [1]	Holdings of Equity Securities of TCPL and BCE [2]
 **Joseph Victor Raymond Cyr, O.C.,** of Montreal, Quebec, age 56, is Chairman, President and Chief Executive Officer of BCE (management holding company). Mr. Cyr has also been Chairman of the Company since April 1989 and Chairman of Montreal Trustco Inc., Montreal, Quebec (holding company) since July 1989. Prior to August 1989, Mr. Cyr was President and Chief Executive Officer of BCE and prior to May 1989, he was also Chairman of the Board of Bell Canada, Montreal, Quebec (a supplier of telecommunications services and equipment). Prior to May 1988, Mr. Cyr was President of BCE and Chairman of the Board of Bell Canada and prior to January 1987, Mr. Cyr was Chairman of the Board, President and Chief Executive Officer of Bell Canada. He has served as a director since 1987.	1,500 TCPL common 45,336 BCE common [3]

Nominee for Election as Director [1]	Holdings of Equity Securities of TCPL and BCE [2]
 **Robert Emmet Dineen, Jr.,** of New York, N.Y., age 49, is a partner of Shearman & Sterling, Attorneys-at-Law, New York, N.Y. He has served as a director since April 1989.	1,221 TCPL common 256 BCE common
 **Albert Jean de Grandpré, C.C., Q.C.,** of Montreal, Quebec, age 68, Founding Director and Chairman Emeritus of BCE (management holding company), is Legal Counsel to the law firm of Lavery, O'Brien, Montreal, Quebec and Chancellor of McGill University, Montreal, Quebec. Prior to August 1989, Mr. de Grandpré was Chairman of the Board of BCE and prior to May 1988, Mr. de Grandpré was Chairman of the Board and Chief Executive Officer of the same company. He has served as a director since 1973.	1,220 TCPL common [4] 108,117 BCE common [4]
 **Russell Edward Harrison,** of Toronto, Ontario, age 68, is a director of Canadian Imperial Bank of Commerce, Toronto, Ontario (Canadian chartered bank). He has served as a director since 1976.	7,339 TCPL common 398 BCE common
 **Robert Howell Jones,** of Winnipeg, Manitoba, age 65, is Chairman of Investors Group Inc., Winnipeg, Manitoba (financial services holding company). Prior to September 1986, Mr. Jones was Chairman and prior to April 1985, he was Chairman and Chief Executive Officer of The Investors Group, Winnipeg, Manitoba (financial services holding company). He has served as a director since 1978.	3,330 TCPL common [5] 7,824 BCE common [6]
 **Thomas Edward Kierans,** of Toronto, Ontario, age 49, is President of the C.D. Howe Institute, Toronto, Ontario (independent, non-profit research and educational institution). Prior to September 1989, Mr. Kierans was President of ScotiaMcLeod Inc. (formerly McLeod Young Weir Limited), Toronto, Ontario (Canadian investment dealer).	1,000 TCPL common
 **Gerald James Maier,** of Calgary, Alberta, age 61, is President and Chief Executive Officer of the Company. Prior to September 1985, Mr. Maier was President and Chief Executive Officer of Bow Valley Industries Ltd., Calgary, Alberta (oil and gas production, exploration and development). Mr. Maier is also Chairman and a director of Western Gas Marketing Limited and of TransCan Holdings Inc., wholly-owned subsidiaries of the Company. He has served as a director since 1983.	131,034 TCPL common [7] 500 BCE common

Nominee for Election as Director [1]	Holdings of Equity Securities of TCPL and BCE [2]

Gordon Peter Osler, of Toronto, Ontario, age 67, has been Chairman of North American Life Assurance Company, Toronto, Ontario (insurance company) since April 1986. Prior to April 1989, Mr. Osler was also Chairman of the Company. Prior to May 1986, Mr. Osler was Chairman of Slater Steels Corporation, Hamilton, Ontario (steel producers and fabricators) and prior to January 1986, he was Chairman of Stanton Pipes Limited, Toronto, Ontario (holding company). He has served as a director since 1954.

8,500 TCPL common

Herbert Charles Pinder, of Saskatoon, Saskatchewan, age 66, is President of Saskatoon Trading Company, Limited, Saskatoon, Saskatchewan (real estate holding and investment company). He has served as a director since 1971.

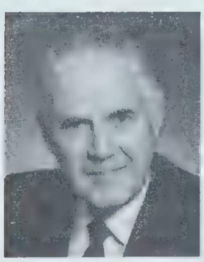
1,505 TCPL common [8]

Harry George Schaefer, of Calgary, Alberta, age 53, is Deputy-Chairman of the Board and Chief Financial Officer of TransAlta Utilities Corporation, Calgary, Alberta (generation and sale of electric energy). Prior to May 1989, Mr. Schaefer was Vice-Chairman of the Board and Chief Financial Officer and prior to May 1985, he was Senior Vice-President, Financial and Corporate Planning, of the same company. He has served as a director since 1987.

500 TCPL common

James Stuart Spalding, of Westmount, Quebec, age 55, is Executive Vice-President, Finance, of BCE (management holding company). He has served as a director since 1985.

350 TCPL common
19,893 BCE common [9]



Neil John Stewart, of Calgary, Alberta, age 66, was Vice-President, Supply and Marketing, of Amoco Canada Petroleum Company Ltd., Calgary, Alberta (oil and gas production, exploration and development) prior to August 1986. Mr. Stewart is also a former Vice-Chairman of the National Energy Board and a former Chairman of the Energy Supplies Allocation Board. He has served as a director since 1987.

1,000 TCPL common

Robert Stollery, of Edmonton, Alberta, age 65, is Chairman of PCL Constructors Inc., Edmonton, Alberta (general construction contractors). Prior to May 1989, Mr. Stollery was Chairman, President and Chief Executive Officer of the same company.

14,000 TCPL first preferred

Nominee for Election as Director (1)	Holdings of Equity Securities of TCPL and BCE (2)
 **Allan Richard Taylor,** of North York, Ontario, age 57, is Chairman and Chief Executive Officer of The Royal Bank of Canada, Toronto, Ontario (Canadian chartered bank). Prior to June 1986, Mr. Taylor was President and Chief Operating Officer of the same bank. He has served as a director since 1983.	1,200 TCPL common

Notes:

(1) Unless otherwise indicated, the principal occupation or employment shown for each nominee represents his principal occupation or employment during the past five years. All nominees are Canadian residents, with the exception of Mr. Dineen, Jr., who is a United States resident. The information as to equity securities beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by the nominees. Except as indicated in the Notes below, the nominees have sole voting and dispositive power with respect to the securities listed above.

(2) As to each class of equity securities of TCPL and BCE, the percentage of outstanding equity securities beneficially owned by any one director or nominee or by all directors and officers of the Company as a group (of which there are 46) does not exceed 1% of the class so owned.

(3) The shares listed include 38,817 shares as to which Mr. Cyr has the right to acquire beneficial ownership through the exercise of options.

(4) The shares listed include 1,200 TCPL common shares and 5,172 BCE common shares as to which Mr. de Grandpré shares investment and voting power with his wife and four children. Also included are 94,718 BCE common shares as to which Mr. de Grandpré has the right to acquire beneficial ownership through the exercise of options.

(5) The shares listed include 2,000 shares beneficially owned by a privately owned investment company whose sole shareholders are children of Mr. Jones and 330 shares beneficially owned by Mr. Jones' wife. Mr. Jones disclaims beneficial ownership of such shares.

(6) The shares listed include 1,517 shares beneficially owned by the company referred to in Note 5. Mr. Jones disclaims beneficial ownership of such shares.

(7) The shares listed include 102,500 shares acquired pursuant to KESIP and 7,500 shares as to which Mr. Maier has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP. KESIP is defined and described under "Information Concerning the Remuneration of Directors and Officers".

(8) The shares listed include 600 shares beneficially owned by Mr. Pinder's wife. Mr. Pinder disclaims beneficial ownership of such shares.

(9) The shares listed include 18,937 shares as to which Mr. Spalding has the right to acquire beneficial ownership through the exercise of options. Also included are 100 shares beneficially owned by Mr. Spalding's wife regarding which Mr. Spalding disclaims beneficial ownership.

The following is a list of directorships held by nominees in any company other than TCPL with a class of securities registered pursuant to Section 12 of the United States Securities Exchange Act of 1934 or subject to the requirements of Section 15(d) of such Act or in any company registered as an investment company under the United States Investment Company Act of 1940:

Nominee	Name of Companies in Which Such Directorships Held
J. V. R. Cyr	BCE; Bell Canada; Northern Telecom Limited; Quebecor inc.
A. J. de Grandpré	BCE; Bell Canada; Chrysler Corporation; Northern Telecom Limited; Repap Enterprises Corporation Inc.; The Seagram Company Ltd.

Nominee	Name of Companies in Which Such Directorships Held
R. E. Harrison	Campbell Soup Company; MacMillan Bloedel Limited.
R. H. Jones	Great-West Life Assurance Co.; Inspiration Resources Corporation.
G. J. Maier	BCE.
G. P. Osler	Household International Inc.
H. C. Pinder	Ideal Basic Industries Inc.
A. R. Taylor	Canadian Pacific Limited.

ATTENDANCE AT MEETINGS

During 1989, there were 10 meetings of the Board of Directors. In 1989, each director attended 75% or more of the total number of board meetings and meetings of all committees of the Board of Directors on which he served.

FUNCTIONS OF STANDING COMMITTEES

The Board of Directors has appointed the Audit Committee, Executive Committee, Finance Committee, Human Resources Committee, Key Employee Stock Incentive Plan Committee and Nominating Committee of the Board of Directors.

The Audit Committee, composed of J.S. Spalding (Chairman), A.J. de Grandpré, R.E. Harrison, R.H. Jones and H.G. Schaefer (since April 1989), held seven meetings during 1989. None of the Audit Committee members is an officer of the Company. The Audit Committee reviews the fee arrangement of, and scope of the audit to be undertaken by, the independent auditors. It reviews the financial statements of the Company, the independent auditors' report thereon and the activities and recommendations of the Company's internal auditors.

The Executive Committee, composed of J.V.R. Cyr (Chairman), A.J. de Grandpré, R.H. Jones (since April 1989), G.J. Maier and G.P. Osler, held two meetings during 1989. The Executive Committee reviews and considers potential acquisitions and investments by the Company and makes recommendations in connection therewith to the Board of Directors. It also has the full power and authority of the Board of Directors to act on any matters specifically directed by the Board of Directors, except as limited by law.

The Finance Committee, composed of H.G. Schaefer (Chairman), G.J. Maier, J.S. Spalding and A.R. Taylor, held six meetings during 1989. The Finance Committee reviews corporate policy with respect to the declaration of dividends on shares of the Company and foreign exchange matters, reviews all proposed borrowing or other financial transactions of the Company (including the offering of any securities) and makes recommendations in connection therewith to the Board of Directors.

The Human Resources Committee, composed of G.P. Osler (Chairman), J.H.C. Clarry, J.V.R. Cyr, H.C. Pinder and N.J. Stewart, held five meetings during 1989. The Human Resources Committee approves the compensation arrangements for senior management other than those benefits which are granted under KESIP. The Human Resources Committee annually reviews the performance of the officers of the Company and its major subsidiaries and makes recommendations to the Board of Directors relating to senior management succession.

The KESIP Committee, composed of G.P. Osler (Chairman), J.H.C. Clarry, H.C. Pinder and N.J. Stewart, held four meetings in 1989. None of the KESIP Committee members is eligible to participate in KESIP. The KESIP Committee has the authority to designate the employees of the Company, including the salaried directors and officers of the Company, who may participate in KESIP, to fix the extent of such participation, to determine (subject to certain limitations) the purchase price of shares to be allocated to KESIP participants, to determine the conditions on which share purchase options may be awarded to KESIP participants and to determine certain other matters in connection with the proper administration of KESIP.

The Nominating Committee, composed of A.J. de Grandpré (Chairman), J.V.R. Cyr (since April 1989), R.E. Harrison and G.P. Osler, held three meetings during 1989. The Nominating Committee reviews

the qualifications of persons nominated for appointment or election as directors by any member of the Board of Directors or by any shareholder of the Company (upon such shareholder's written request submitted in a timely manner to the Company at its executive office in Toronto, Ontario), and submits its recommendations to the Board of Directors. It also makes recommendations concerning the nomination of directors previously elected, the composition of the various committees of the Board of Directors and the remuneration of directors.

INFORMATION CONCERNING THE REMUNERATION OF DIRECTORS AND OFFICERS

CASH REMUNERATION

The Company remunerates each director who is not an officer of the Company for his services as follows: an annual retainer fee of $13,000; an annual fee of $2,000 for each Committee of the Board of Directors of which he is a member; and an additional fee of $2,500 for each Committee of the Board of Directors of which he is Chairman. The Company also pays each such director a fee of $750 for his attendance at each meeting or adjourned meeting of the Board of Directors or Committee of which he is a member and reimburses him for his out-of-pocket expenses incurred in attending such meetings. Directors who are also officers of the Company are not paid directors' fees, with the exception of the Chairman of the Company, Mr. Cyr, who is paid an annual fee of $40,000 for serving in his capacity as Chairman in addition to the fees referred to above. Mr. Osler, who served as Chairman of the Company until April 1989, received $16,672 for serving in such capacity during 1989 in addition to the fees referred to above.

The following table sets out the aggregate cash compensation paid or payable on an accrual basis for services rendered in all capacities to the Company and its subsidiaries in respect of the financial year ended December 31, 1989, to each of the five most highly compensated executive officers of the Company and to all executive officers of the Company as a group. The table excludes compensation to any such person for the portion of 1989 during which such person was not an executive officer.

Name of Individual or Number of Persons in Group	Principal Capacities in Which Served During 1989	Salaries and Accrued Annual Incentive Payments(1)
G. J. Maier	President and Chief Executive Officer	$ 790,000
C. K. Orr	Group Vice-President	$ 295,000
G. M. Hugh	Chief Operating Officer	$ 248,667
M. T. G. Graye	Chief Financial Officer	$ 220,000
K. G. Whiteside	Chief Administrative Officer	$ 220,000
Executive Officers as a Group (12 persons including the above-named)		$2,491,527

Note:

(1) Includes remuneration paid or accrued for the period in 1989 during which a person was an executive officer of the Company, and payment in lieu of vacation to three executive officers who are not named above totalling $171,800, but excludes dividends paid by the Company on shares purchased pursuant to KESIP. Certain non-cash compensation benefits paid or distributed during 1989 to the individuals named in the above table have not been included on the basis that, in the case of each such person, (a) they do not exceed the lesser of (i) 10% of the cash compensation reported in the table for such person and (ii) U.S. $25,000; or (b) they have been disclosed elsewhere in this Circular. Certain non-cash compensation benefits paid or distributed during 1989 to executive officers of the Company as a group have not been included on the basis that (a) they do not exceed the lesser of (i) $10,000 times the number of persons in the group and (ii) 10% of the cash compensation reported in the table for such group; or (b) they have been

disclosed elsewhere in this Circular. Amounts shown include incentive payments accrued for the financial year ended December 31, 1989, distributed in 1990, under the Company's Annual Incentive Plan. See "Remuneration Pursuant to Plans - Annual Incentive Plan".

REMUNERATION PURSUANT TO PLANS

KEY EMPLOYEE STOCK INCENTIVE PLAN

In 1979 the Company established the Key Employee Stock Incentive Plan ("KESIP"). KESIP includes both a share purchase feature and a stock option feature, the latter having been added to KESIP by amendments adopted and approved by the Company's shareholders in 1988. The KESIP Committee determines which employees of the Company, including its officers, are eligible to participate. Currently all officers of the Company other than the Chairman are members of KESIP. Directors who are not employees of the Company are not eligible to participate in KESIP. In each year the KESIP Committee determines the award granted to each participant who is an officer and the Chief Executive Officer determines the awards granted to all other participants.

Share Purchase Feature

Under the share purchase feature of KESIP, Montreal Trust, as Trustee, purchases authorized but unissued common shares of the Company on behalf of key employees of the Company or any wholly-owned subsidiary who are selected and agree to participate in KESIP. The purchase from the Trustee by the participant is funded by an interest-free loan provided by the Company or such subsidiary. The participant agrees to pay this loan to the Trustee (without interest) on the last business day preceding the tenth anniversary of the date the shares were allocated to the participant (the "Date of Allocation"). During the period in which the purchase price is unpaid, the shares are held as security for the payment of the purchase price. A portion of dividends paid on the common shares held by the Trustee for participants may be required to be remitted to the Company by way of repayment of participants' interest-free loans. The KESIP Committee has determined that 50% of all dividends paid on such shares issued under KESIP after December 1, 1987 will be remitted to the Company unless otherwise determined by the KESIP Committee. Upon each of the first five anniversaries of the Date of Allocation, a participant attains the right thereafter to prepay all or part of the portion of the purchase price corresponding to 20% of the shares purchased. Upon prepayment, the participant is entitled to receive share certificates relating to the portion of the purchase price paid.

The purchase price of the common shares, both to the Trustee and to the participant, is either the average sale price of board lots of such shares sold on The Toronto Stock Exchange on the business day last preceding the Trustee's purchase or such price as may be fixed by the KESIP Committee, provided that such price may not be less than 90% of the average sale price (as determined under KESIP) of common shares of the Company on The Toronto Stock Exchange on any one trading day during the 30 days preceding the Trustee's purchase.

At the request of a participant, the Trustee may, on behalf of and at the direction of the Company (acting through the KESIP Committee in the case of directors or officers), repurchase for cancellation common shares in respect of which such participant may then be entitled to prepay the purchase price. The repurchase price is the closing price at which board lots of the Company's common shares were traded on The Toronto Stock Exchange on the date of such request.

If the participant's employment is terminated for any reason, including resignation or dismissal for cause, but excluding termination by reason of retirement, death or disability and termination following a change in control as described below, the participant is obligated to pay the entire balance of the purchase price within two days of cessation of employment, subject to the Trustee's right to repurchase any common shares as to which the right of prepayment has not yet accrued ("Unaccrued Shares") at the same price per common share as originally paid by the participant to the Trustee less any balance due the Trustee. In the case of retirement, death or disability, such obligation to pay the purchase price must be discharged by the participant or his or her personal representative within 180 days after cessation of employment or, if earlier, the last business day preceding the tenth anniversary of the Date of Allocation, subject to the Trustee's right to repurchase any common shares as to which the purchase price has not been paid by the participant at the same

price per common share as originally paid by the participant less any balance due the Trustee. See "Severance Policy Applicable to Head Office Move from Toronto to Calgary" for certain information as to the treatment of loans to severed employees.

If a takeover bid is made which would result in the offeror owning, in the aggregate, in excess of 80% of the outstanding common shares and other such securities of the Company, a participant is entitled to prepay the purchase price for all common shares held by the Trustee for such participant with a view to tendering such common shares to the offeror. Should the participant not exercise such right of prepayment, the Trustee may repurchase from the participant all such common shares at the same price per common share as originally paid by the participant less any balance due the Trustee.

If the employment of the participant is terminated at any time during a period of two years following a change of control of the Company, the participant is not obligated to pay the purchase price for the common shares then held by the Trustee until the end of the original ten year payment period. On such a termination, however, the Trustee has the right, on behalf of the Company, to repurchase the Unaccrued Shares at the same price per common share as that originally paid by the participant less any balance due the Trustee; provided, however, that if the participant should die or reach retirement age after such termination, then the provisions referred to above under which the participant must discharge his obligation within 180 days, subject to the Trustee's right of repurchase, apply. The last change of control of the Company for these purposes occurred in December 1983 at which time BCE became the Company's principal shareholder.

In addition, if BCE were to make a share exchange offer for the Company's common shares, KESIP participants would be entitled to accept such exchange offer. Any shares of BCE so received would be subject in all respects to the provisions of KESIP. Should the participant not make the exchange within the time provided in the share exchange offer, the Trustee may repurchase from the participant all common shares then held by the Trustee for the participant under KESIP at the participant's purchase price per common share less any balance due the Trustee.

Stock Option Feature

The stock option feature of KESIP is administered by the KESIP Committee. Options to purchase common shares of the Company may be awarded to KESIP participants, in the case of salaried directors and other officers, by the Board of Directors (provided that a majority of the Board and a majority of the directors acting in the matter are "disinterested persons", as defined in KESIP) or by the KESIP Committee and, in the case of all other participants, by the Board of Directors, the KESIP Committee or the Chief Executive Officer, in addition to or in substitution for the purchase of common shares to be held by the Trustee. Each option issued to officers may be accompanied by a share appreciation right which shall be exercisable only within 60 days following a share exchange offer for common shares of the Company by BCE, if one were to be made. The exercise price is determined by the KESIP Committee at the time the option is awarded. The exercise price of the options shall be either the average sale price of board lots of common shares of the Company sold on The Toronto Stock Exchange on the business day last preceding the award date or such price, as may be fixed by the KESIP Committee, provided that such price may not be less than 90% of the average sale price of the Company's common shares on The Toronto Stock Exchange on any one trading day during the 30 days preceding the award date. Unless otherwise determined by the Board of Directors, the KESIP Committee or the Chief Executive Officer, as the case may be, 20% of the common shares subject to an option become eligible for purchase upon each of the first five anniversary dates following the award date of the option. At the time of awarding an option, the expiry date (the last day on which the option may be exercised) must be established by the Board of Directors, the KESIP Committee or the Chief Executive Officer, as the case may be, provided that the expiry date of an option may not be later than 10 years from the date on which it is granted. Options may be granted until December 5, 1994.

Each share appreciation right gives the holder the right to receive a payment from the Company equal to the excess of the fair market value of a common share of the Company on the date when such right is exercised over the exercise price of the accompanying option. If a KESIP participant elects to exercise a share appreciation right, the Company may, at its sole discretion, make payment on such right in cash or common shares of the Company. For each share appreciation right exercised, the

number of common shares remaining subject to the accompanying option grant is automatically reduced by one share.

The Share Option Agreements currently in use provide that, unless otherwise stipulated in the certificate evidencing an option issued by the Company to the recipient of the award of an option, the exercise price of an option will not be less than the average of the closing price of one common share of the Company sold as part of a board lot on The Toronto Stock Exchange on the five days immediately preceding the award date and on which a board lot of common shares was sold on that exchange. At any time between the maturity date for a portion of the common shares subject to an option awarded to a participant and the expiry date of such option, such a participant may purchase such portion of the common shares pursuant to the exercise of such option, provided that the KESIP Committee may at any time and from time to time fix a minimum number of common shares in respect of which the holder of an option may exercise part of any option held by such holder. In connection with the exercise of an option, in whole or in part by an optionholder, payment of an amount equal to the aggregate exercise price of the common shares to be purchased pursuant to the exercise of such option or part thereof must be made by certified cheque or bank draft payable to the Company. Any accompanying share appreciation right may, however, only be exercised within 60 days following a share exchange offer by BCE for common shares of the Company. Under the Share Option Agreements, the expiry date of an option shall be the earlier of the date fixed by the Board of Directors, the KESIP Committee or the Chief Executive Officer, as the case may be, at the time the option is awarded and two days following the date on which the KESIP participant ceases to be an employee of the Company, provided that on the death of such employee, or the earliest of (i) the date on which such employee becomes entitled to receive an early retirement pension under the pension plan of the Company, (ii) the date on which such employee becomes entitled to receive a regular retirement pension or a disability pension under the pension plan of the Company and (iii) the first day of the month following the month in which such employee attains age 65, the maturity dates of any option then held by the optionholder which are later than such date shall be deemed to be such date and the expiry date of all such options shall be deemed to be the earlier of (i) 180 days following such date and (ii) the tenth anniversary of the award date of such option. Both the maturity date and expiry date of any option may be accelerated or extended by the KESIP Committee with the consent of the KESIP participant, provided that the expiry date of any option may not be extended beyond the tenth anniversary of the award date. See "Severance Policy Applicable to Head Office Move from Toronto to Calgary" for certain information as to options held by severed employees.

The Share Option Agreements further provide for an election by participants who hold options to accept a share exchange offer for common shares of the Company by BCE in which case shares issuable to the participant pursuant to the exercise of his options will be tendered to such offer by the Company on such participant's behalf and the Company will direct BCE to issue to such participant the shares of BCE received upon the exchange. If a participant holding options intends to exercise such options but does not elect to accept such share exchange offer by BCE, the participant will be required to sell all shares receivable by him upon the exercise of such options to the Company at the same price per share as the exercise price or prices provided in such options. No participant holding options, however, is obligated to accept such share exchange offer or exercise any options in the event of such exchange offer.

Options may not be assigned or transferred, but following the death of a KESIP participant holding unexpired options, the personal representative of the participant may exercise such options prior to the deemed expiry date.

If, prior to the complete exercise of any option, a stock dividend is paid on the common shares of the Company or such shares are consolidated, subdivided, converted, exchanged or reclassified in any way (the "Event"), the participant holding the option shall, upon exercising the option, be entitled to such number and kind of shares, other securities or property to which such holder would have been entitled as a result of the Event had he actually owned the common shares subject to the unexercised option at the time of the Event.

General Information

The maximum number of common shares of the Company which may be subject to KESIP consists of 15,000,000 common shares provided that not more than 1,200,000 shares may be set aside and

reserved for issue under KESIP annually. The maximum amount of common shares available for issue and the issue price are subject to appropriate adjustment by the KESIP Committee if the common shares are consolidated, subdivided or reclassified or if any other action of a similar nature affecting the common shares occurs. In certain cases common shares repurchased by the Trustee may be available for future issuance under KESIP.

On May 2, 1989, the Company effected a plan of arrangement (the "Plan of Arrangement") which separated the Company's oil and gas exploration, development and production business from its pipeline and other businesses. As the Plan of Arrangement was under active consideration at the end of 1988, no stock options or share appreciation rights were granted under KESIP during 1988 (other than options granted to one former executive officer which were subsequently cancelled in conjunction with effecting the Plan of Arrangement). Employees eligible for such grants were advised in December 1988 that a dollar allocation to each eligible employee had been approved by the KESIP Committee, but that the actual grant of stock options and share appreciation rights having an aggregate exercise price equal to such allocation would be made following the effective date of the arrangement. On June 15, 1989 options (and, in certain cases, share appreciation rights) having an award date of December 8, 1988 and an expiration date of December 8, 1998 were granted to persons who had received such dollar allocations in 1988. On December 6, 1989 options (and, in certain cases, share appreciation rights) having an award date of December 6, 1989 and an expiration date of December 6, 1999 were granted to eligible employees. No KESIP share purchase awards were made in 1989.

As at the date hereof, 3,978,070 common shares of the Company have been purchased under the share purchase feature of KESIP by participants. On June 15, 1989, 307,700 options having an exercise price of $14.70 were granted, of which 4,600 were exercised and 9,540 reverted to the plan, thus resulting in 293,560 being currently outstanding. On December 6, 1989, 284,900 options having an exercise price of $16.75 were granted, of which 6,200 reverted to the plan, thus resulting in 278,700 being currently outstanding. Approximately 10,400,000 additional shares may be set aside and reserved for issuance under KESIP subject to the annual limitation of 1,200,000 shares, of which 354,590 shares, in addition to the 572,260 shares subject to outstanding options, have been so set aside and reserved for issuance by the Board of Directors. There have been 305 key employees selected to participate in KESIP, 169 of whom are current participants.

The following table sets out information relating to the options and share appreciation rights granted to certain named executive officers of the Company and to all executive officers of the Company as a group in the fiscal year ended December 31, 1989:

Name of Individual or Number of Persons in Group[1]	**Number of Options Granted**		**Number of Share Appreciation Rights Granted**		**Exercise Price Per Share**	
	June	**December**	**June**	**December**	**June**	**December**
G.J. Maier	37,500	39,500	37,500	39,500	$14.70	$16.75
C.K. Orr	14,100	12,800	14,100	12,800	$14.70	$16.75
G.M. Hugh	12,100	12,100	12,100	12,100	$14.70	$16.75
M.T.G. Graye	9,300	10,000	9,300	10,000	$14.70	$16.75
K.G. Whiteside	10,300	10,000	10,300	10,000	$14.70	$16.75
Executive Officers as a Group (12 persons including the above-named; 2 such persons were not eligible to and did not receive any grant)	124,900	109,500	101,500	101,900	$14.70	$16.75

Note:

(1) No options were exercised by the named executive officers of the Company or any other executive officer of the Company during the fiscal year ended December 31, 1989.

As at the date hereof, G.J. Maier, a director and officer of the Company, and H.F. Button, D.J. Cohen, G.J. Couper, A.A. Douloff, M. Durnin, M.T.G. Graye, D.E. Henwood, B.F. Hill, R.B. Hodgins, G.M. Hugh, S. Jakymiw, W.E. Lunt, J.W.S. McOuat, C.K. Orr, G.G. Penrose, D.E. Reid, D.S. Robson, D. Russell, R.F. Sim, L.W. Sloan, R.T. Smith, J.W. Stinson, K.G. Whiteside and A.A. Wilkins, officers of the Company, C.R. Frew, an officer of a subsidiary of the Company, and J.M. Cameron (a director and, until May 1, 1989, an officer of the Company), H.N. Nichols (an officer of the Company until January 31, 1989) and R.D. Walker (an officer of the Company until July 1, 1989), were indebted in respect of the unpaid purchase price of shares purchased pursuant to KESIP. The largest aggregate amount of such indebtedness outstanding at any time since January 1, 1989 and the balance as at the date hereof for each such individual was as follows:

Name	Largest Aggregate Amount of Indebtedness (1)	Balance as at the Date Hereof (1)
H.F. Button	$ 395,848	$ 394,333
J.M. Cameron	1,600,118	1,094,357
D.J. Cohen	80,960	79,982
G.J. Couper	388,778	165,611
A.A. Douloff	298,897	109,154
M. Durnin	203,597	107,228
C.R. Frew	450,998	306,051
M.T.G. Graye	526,861	523,716
D.E. Henwood	557,012	554,122
B.F. Hill	483,350	402,075
R.B. Hodgins	212,129	193,469
G.M. Hugh	1,089,048	880,088
S. Jakymiw	154,783	133,022
W.E. Lunt	83,535	82,472
G.J. Maier	1,534,746	1,518,171
J.W.S. McOuat	406,594	118,970
H.N. Nichols	1,195,936	336,235
C.K. Orr	1,023,451	1,017,204
G.G. Penrose	159,308	131,547
D.E. Reid	286,537	264,172
D.S. Robson	145,029	37,001
D. Russell	289,847	213,081
R.F. Sim	706,861	178,395
L.W. Sloan	49,051	49,051
R.T. Smith	365,193	363,025
J.W. Stinson	148,429	146,219
R.D. Walker	1,013,315	848,886
K.G. Whiteside	823,854	660,559
A.A. Wilkins	714,817	549,102

Note:

(1) Under the Plan of Arrangement registered holders of the Company's common shares (including KESIP participants) received for each common share then held, one new common share of the Company and one common share of Encor Inc. KESIP was amended in April 1989 to provide that a portion of outstanding indebtedness in respect of interest-free loans for purchases of common shares of the Company under KESIP be allocated as a loan directly related to Encor Inc. shares, thus permitting participants to deal separately with the common shares of the Company and Encor Inc. However, the indebtedness set out in the table above is the aggregate indebtedness of officers to the Company under KESIP.

Each employee of the Company who is relocating to Calgary, Alberta is eligible for an interest-free advance funded by the Company up to an amount equal to the equity in his current home for the purposes of making a deposit accompanying an offer to purchase a home in Alberta and closing the purchase of such home prior to closing the sale of his home in Ontario. See "Severance Policy Applicable to Head Office Move from Toronto to Calgary". The largest aggregate amount of such indebtedness outstanding at any time since January 1, 1989 and the balance as at March 16, 1990 for each officer of the Company obtaining such an advance was as follows: G.J. Couper - $70,000; D.E. Henwood - $60,000; R.T. Smith - $20,000; and J.W. Stinson - $52,000.

H.F. Button, an officer of the Company, is indebted to the Company in respect of an interest-free mortgage on his home. The largest aggregate amount of such indebtedness outstanding at any time since January 1, 1989 was $44,907 and the balance as at March 16, 1990 was $37,963.

ANNUAL INCENTIVE PLAN

In 1987 the Company adopted an Annual Incentive Plan whereby officers and senior management employees of the Company and its subsidiaries are entitled to receive annual cash awards which are determined during the first quarter of the financial year following the financial year just completed. The intention of the plan is to closely link participants' overall cash compensation to the performance of the Company and its business units as well as to their respective individual performance. By doing so, officers and senior management are encouraged to work towards the attainment of overall Company and business unit goals. The awards can range from nil to preset limits thus placing a portion of the compensation at risk each year. Eligibility for participation in and the criteria used to determine amounts payable under the Annual Incentive Plan for officers are determined by the Human Resources Committee.

EMPLOYEE SAVINGS PLAN

The Employee Savings Plan (the "ESP") was introduced in 1979 to provide full-time permanent employees of the Company and any designated wholly-owned subsidiary (the "ESP Members") with a means to participate in the profit performance of the Company. Directors who are not employees of the Company are not eligible to participate in the ESP.

All contributions to the ESP are made by the Company, such contributions for each year being equal to the lesser of 5% of either the ESP Members' basic earnings for the calendar year or the net profits of the Company. Contributions are forwarded to the trustees of the ESP on a periodic basis during each calendar year at which time the trustees purchase common shares of the Company in the market and hold them in trust for the ESP Members.

The shares and the dividends paid thereon are allocated to the ESP Members' accounts as of the last business day of December in each year. Three investment share accounts for ESP Members are available: (i) a Deferred Profit Sharing Plan ("DPSP"); (ii) an Employee Profit Sharing Plan ("EPSP"); and (iii) a Registered Retirement Savings Plan ("RRSP"). Shares are allocated to the DPSP and EPSP share accounts at the average purchase price at which the shares were acquired by the trustees during the current calendar year. Shares are allocated to the RRSP share account at the closing market price of the shares on The Toronto Stock Exchange on the date of the deposit of such shares into the RRSP.

The value of the shares that may be allocated to the DPSP and RRSP share accounts is subject to certain limitations as provided for under Canadian income tax laws. Income taxes payable thereon are deferred until such time as the shares are withdrawn. Income taxes are payable on the value of the shares allocated to the EPSP in the year of allocation.

The vesting of shares allocated under ESP depends on the number of credited years' service an ESP Member has with the Company. After five years' credited service, all shares allocated to such ESP Member are vested. ESP Members may vote vested shares. Vested shares may be withdrawn at any time, either in the form of a share certificate or cash proceeds from the sale of such shares (net of brokerage and any applicable withholding tax). See "Severance Policy Applicable to Head Office Move from Toronto to Calgary" for certain information as to the vesting of shares held by severed employees.

The EPSP and DPSP are administered by four trustees who are employees of the Company and the RRSP is administered by Montreal Trust which also acts as the custodian for all shares in the ESP.

The following table sets out the amount of the Company's contributions to the ESP in respect of the fiscal year ended December 31, 1989 and the accrued vested number of shares under the ESP as at December 31, 1989 for certain named executive officers of the Company and for all executive officers of the Company as a group:

Name of Individual or Number of Persons in Group	**Company Contributions to the ESP**[1]	**Accrued Vested Number of Shares as at December 31, 1989**
G. J. Maier [2]	—	—
C. K. Orr	$11,850	2,603
G. M. Hugh	$10,133	3,135
M. T. G. Graye	$8,850	868
K. G. Whiteside	$8,850	3,120
Executive Officers as a Group (12 persons including the above-named; 1 such person was not eligible to and did not receive any contribution)	$75,446	17,782

Notes:

(1) Company contributions to the ESP include brokerage commissions on the acquisition of shares by the trustees.

(2) Does not participate in the ESP.

PENSION AND RETIREMENT BENEFITS

Directors who are also employees of the Company, and all other employees of the Company, participate in the Company's non-contributory defined benefit plan (the "Pension Plan").

Pension Plan benefits are integrated with Canada Pension Plan benefits and are based on between 1.25% and 1.75% of a person's pensionable earnings times the total number of years in the Pension Plan ("Credited Pensionable Service"). Pensionable earnings are defined as the average earnings during the 36 consecutive months when earnings were highest. The Pension Plan benefits are subject to a ceiling of $1,715 for each year of Credited Pensionable Service to a maximum of 35 such years.

In September 1982, the Board of Directors approved an Executive Supplemental Retirement Benefits Plan ("SRP"), pursuant to which a supplemental pension benefit is payable at the discretion of the Human Resources Committee to selected officers of the Company or any wholly-owned subsidiary upon retirement. This plan was subsequently amended effective January 1, 1988. Under the SRP each selected officer becomes entitled to a pension benefit equal to 3.33% of his Pensionable Earnings for each of the first fifteen years of service with the Company and 2% for each of the next ten years. These pension benefits are inclusive of benefits payable under the Pension Plan and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to a selected officer under the Pension Plan and the SRP is 70% of his pensionable earnings at the date of retirement, less the maximum Canada Pension Plan income payable to him at age 65.

The Company has a supplementary arrangement with G.J. Maier whereby for each year of employment with the Company he is credited with two years of service.

On August 2, 1988 a supplementary arrangement was entered into between the Company and C.K. Orr which provides that if Mr. Orr retires as an officer and employee of the Company on May 1, 1992 or such earlier date as is mutually agreeable, then in addition to all retirement benefits to which he

would normally be entitled, he will have the right to elect either of the following (i) credit for an additional five years of Credited Pensionable Service plus an additional annual pension payable until August 1, 1997 in an amount ranging from $3,000 to $5,000, depending on the date of retirement, or (ii) a lump sum cash payment of an amount equal to 6.5 months to 8.5 months of salary, depending on the date of retirement.

Under both the Pension Plan and the SRP, upon retirement a monthly pension is payable for life with 60% continuing to the participant's surviving spouse or, in lieu thereof, a participant may elect optional forms of pension payment including a life annuity or life annuity guaranteed for five or ten years. The payment of Pension Plan benefits is made out of funds held by a trustee for members of the Pension Plan. Any difference between Pension Plan benefits and supplemental benefits calculated under the SRP is paid by the Company.

Assuming that the executive officers named below remain in the employ of the Company until normal retirement age 65 and that the Pension Plan, the SRP and the supplemental arrangements with G.J. Maier and C.K. Orr remain in force substantially in their present forms, such officers will then have approximately the following listed number of years of Credited Pensionable Service: G.J. Maier-16 years; C.K. Orr-21 years; G.M. Hugh-42 years; M.T.G. Graye-39 years; and K.G. Whiteside-38 years.

The following table sets out estimated annual pension benefits (based on the "joint and 60% survivor" method) payable under the Pension Plan and the SRP (excluding amounts payable under the Canada Pension Plan) to officers of the Company in specified pensionable earnings and years of credited pensionable service classifications:

Pensionable Earnings	**Years of Credited Pensionable Service** 15	20	25 and Over
$ 200,000	$ 93,000	$ 113,000	$ 133,000
300,000	143,000	173,000	203,000
400,000	193,000	233,000	273,000
500,000	243,000	293,000	343,000
600,000	293,000	353,000	413,000
700,000	343,000	423,000	483,000
800,000	393,000	473,000	553,000
900,000	443,000	533,000	623,000
1,000,000	493,000	593,000	693,000

OTHER COMPENSATORY ARRANGEMENTS

Mr. Cameron, a current director and former President and Chief Executive Officer, Pipeline Division of the Company, elected to take early retirement from the Company effective May 1, 1989. Mr. Cameron, who was 60 years of age and who had 22 years and 7 months service with the Company on the date of his retirement, received a lump sum cash payment of $314,167 in May 1989 from the Company. This payment represents a retirement allowance that is in addition to the benefits to which Mr. Cameron is entitled under the Pension Plan and SRP.

Mr. Walker, a former Senior Vice-President of the Company, elected to take early retirement from the Company effective July 1, 1989. Mr. Walker, who was 57 years of age and who had 32 years and 11 months service with the Company on the date of his retirement, received a lump sum cash payment of $373,625 in July 1989 from the Company. This payment represents a retirement allowance that is in addition to the benefits to which Mr. Walker is entitled under the Pension Plan and SRP.

Coincident with the retirement of Mr. Cameron and Mr. Walker, each such officer entered into an agreement (each a "KESIP Arrangement") dated as of the date of his respective retirement, with the Company and Montreal Trust, as Trustee under KESIP. Each KESIP Arrangement provides that, notwithstanding the officer's retirement from the employ of the Company, the purchase price (as established under KESIP) of shares held by the Trustee for the benefit of such officer pursuant to KESIP which otherwise would have been payable 180 days after retirement, shall be payable not later than the earlier of the last business day preceding the tenth anniversary of the Date of

Allocation or 180 days following attainment of age 65. Each KESIP Arrangement also provides that commencing with the dividends payable July 31, 1989, 50% of all dividends paid on shares held by the Trustee will be remitted to the Company by way of repayment of the respective officer's interest-free loan. Each officer has agreed, as a condition of his respective KESIP Arrangement, that he will not, after his retirement, engage in any capacity in any business or activity that will directly conflict with or be directly competitive with the interests or undertakings of the Company. A breach of this condition may, at the election of the Company and the Trustee, result in the entire purchase price of shares held by the Trustee for the benefit of the defaulting officer becoming payable 180 days after the giving of written notice to that effect to such officer. Each such officer has also entered into an option agreement dated as of his retirement date with the Company which provides that options granted pursuant to KESIP, which otherwise would have expired 180 days after retirement, shall expire on the date that is 180 days following the first day of the month following the month in which such officer attains the age of 65.

Subsequent to the retirement of Mr. Cameron as an officer of the Company on May 1, 1989, an agreement (the "Consultant Agreement") effective September 1, 1989 was entered into between the Company and a private company of which Mr. Cameron is an executive officer. Under the terms of the Consultant Agreement, the private company (the "Consultant") has agreed to cause Mr. Cameron to provide advisory consulting services in directing the relocation of the Company's head office from Toronto, Ontario to Calgary, Alberta for a fee not exceeding $1,500 per day for services rendered in 1989, increasing by 6% for services rendered in 1990. The Consultant Agreement has an initial term of six months, extendable thereafter on a monthly basis upon mutual agreement. The Company also provides the Consultant with office space and certain perquisites, including proper out-of-pocket costs and expenses incurred in connection with the performance of such consulting services. As at the date hereof, the Company has paid the Consultant $142,677 pursuant to the Consultant Agreement.

Subsequent to the cessation of Mr. Nichols' employment as Executive Vice-President of the Company effective January 31, 1989, an agreement (the "Termination Agreement") made as of February 1, 1989 was entered into between the Company and Mr. Nichols. Under the Termination Agreement, Mr. Nichols is entitled to the continuance of certain benefits and perquisites to the extent such items were previously received by him, for the 28-month period commencing on February 1, 1989 and ending on May 31, 1991. The Company has agreed, among other things, to pay Mr. Nichols (or his estate) a retiring allowance (the "retiring allowance") of $575,866 in 28 equal monthly instalments of $20,567 each in arrears during such 28-month period. In addition, Mr. Nichols, who was 51 years of age and who had 32 years and 7 months service with the Company on the date of his termination, is entitled to gross annual payments under the Pension Plan and the SRP of: $125,000 if he elects to receive payments commencing at age 55; $146,000 if he elects to receive payments commencing at age 60; or $182,325 if he elects to receive payments commencing at age 65, based upon a joint and survivor 60% pension . Mr. Nichols is also entitled to participate in any adjustments or improvements to the Plans made from the date he elects to receive pension payments.

As at the date of termination, Mr. Nichols had been allocated 89,200 common shares under KESIP, 23,300 of which were Unaccrued Shares. Under KESIP, Mr. Nichols would have been obligated to pay the entire balance of the purchase price for his KESIP shares within two days of cessation of employment, subject to the Trustee's right to repurchase any Unaccrued Shares at the same price per share as originally paid by Mr. Nichols to the Trustee less any balance due the Trustee. The terms of the KESIP arrangement with Mr. Nichols were revised by the Termination Agreement. The Termination Agreement applies to all vested shares and Unaccrued Shares that become vested over the 28-month period ending May 31, 1991 and, subject to Mr. Nichols' election, any remaining Unaccrued Shares outstanding as at May 31, 1991. The interest-free loans to Mr. Nichols under KESIP will continue to May 31, 1991 subject to the obligation of Mr. Nichols to pay such loans on the last business day preceding the tenth anniversary of the date the shares were allocated to him. The Termination Agreement also provides that 50% of all dividends otherwise payable to Mr. Nichols in respect of KESIP shares held by the Trustee for his benefit pursuant to KESIP shall instead be remitted by the Trustee to the Company in reduction of Mr. Nichols' outstanding KESIP loan. Interest-free loans associated with vested shares (including Unaccrued Shares which Mr. Nichols elects to treat as vested) as at May 31, 1991 will be payable no later than 180 days immediately following May 31, 1991.

SEVERANCE POLICY APPLICABLE TO HEAD OFFICE MOVE FROM TORONTO TO CALGARY

On October 27, 1989, the Company announced that its head office which is currently located in Toronto, Ontario would be moved to Calgary, Alberta in 1990. In connection with that move, the Company has established a severance policy to ensure that those employees who are unable to move to Calgary and who must resign their position with the Company be compensated for their loss of employment with the Company. Under the severance policy, a severance period is established for each employee which is equal to (i) 0.5 months for each year of service, plus (ii) 2 to 4 months based on the employee's age, if age 45 or older, plus (iii) 1.5 to 12 months based on the employee's job level. An employee is entitled to severance payments equal to his salary for the severance period, which payments may be taken, at the election of the employee, in a lump sum or instalments either over the severance period or over a period equal to twice the severance period. For the purposes of determining severance payments, salary will include base salary plus a percentage of the employee's incentive target awards established under the Company's Annual Incentive Plan. Each participant in the Company's Annual Incentive Plan whose employment is so terminated will also receive a payment under such plan based on a percentage of his 1990 base salary, pro rated for the period January 1, 1990 to the date of severance. In addition, for the severance period, employees will be entitled to continuance of certain benefits and perquisites, including group life insurance, certain medical benefits, financial planning services, automobile allowance, professional association and club membership fees, to the extent such items were previously received by the employee. Membership in the ESP will be discontinued on the employee's final date of employment with contributions by the Company to be made for partial service for 1990, and upon severance, all common shares of the Company allocated to the employee under ESP will be vested. As regards the severed employee's interest in shares allocated or stock options granted under KESIP, (i) employment during 1990 through the date of severance will be included for vesting purposes, (ii) his Share Purchase Agreement will be amended to provide that he will be obligated to discharge any loans made under the share purchase feature of KESIP not later than the earlier of the last business day preceding the tenth anniversary of the Date of Allocation or 180 days after termination of employment and (iii) his Share Option Agreement will be amended to provide that any options granted under the stock option feature of KESIP will be extended to expire on such 180th day.

Based on an assumed last date of employment of June 30, 1990, in addition to continuance of benefits and perquisites as discussed above, Mr. Graye and Mr. Whiteside, each of whom has indicated that he will not be joining the Company in Calgary, would under the policy be entitled to payments totalling approximately $353,500 and $479,500, respectively, and all executive officers as a group would under the policy be entitled to severance totalling approximately $833,000 (representing the aggregate of the entitlement to such payments of Mr. Graye and Mr. Whiteside).

APPOINTMENT OF AUDITORS

The Board of Directors recommends that Peat Marwick Thorne, Chartered Accountants, be reappointed as the Company's auditors to hold office until the close of the next annual meeting. This firm has served as the auditors of the Company since 1956.

Representatives of Peat Marwick Thorne will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

OTHER INFORMATION

TRANSACTIONS WITH MANAGEMENT AND OTHERS

A.R. Taylor, a director of the Company, is, and during 1989 was, a senior officer of The Royal Bank of Canada. Credit facilities have been granted to the Company and certain of its subsidiaries by this Canadian chartered bank in the ordinary course of business, such facilities having terms which are equivalent to the terms of credit facilities granted to the Company by other banks. In particular, as at December 31, 1989 the Company and its subsidiaries had approximately $28.8 million in aggregate loans outstanding with The Royal Bank of Canada, all of which were loans bearing rates of interest not exceeding the prime rate. As at December 31, 1989 the Company and certain of its subsidiaries

had credit facilities including operating lines of credit of approximately $210.9 million with The Royal Bank of Canada.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Company maintains directors' and officers' liability insurance with a policy limit of U.S. $50 million in the aggregate subject to deductibles as follows: in respect of directors and officers - nil; in respect of corporate reimbursement - U.S. $500,000 (U.S. $250,000 until September 30, 1989) for each loss. Generally, under this insurance the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Excluded from coverage are illegal acts and those acts which result in personal profit. For the year ended December 31, 1989 the total annual premium in respect of such insurance was U.S. $278,152 which was paid entirely by the Company. Of this amount, U.S. $69,538 was paid in respect of directors as a group and U.S. $208,614 was paid in respect of officers as a group.

SHAREHOLDER PROPOSALS

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 1991 annual meeting of common shareholders of the Company (expected to be held in April 1991) must be received by the Vice-President and Corporate Secretary of the Company on or before the close of business on January 24, 1991; the deadline for such proposals pursuant to United States securities laws is November 29, 1990.

Dated at Toronto, Ontario, March 16, 1990.

DIRECTORS' APPROVAL

The contents and the sending of this Circular have been approved by the Board of Directors.

R. F. Sim
Vice-President and Corporate Secretary

The Annual Information Form of the Company dated March 20, 1990 and the Management Information Circular and Proxy Statement dated March 6, 1989 for the Company's last annual meeting have been filed with securities commissions or similar authorities in Canada and are available (without charge to holders of common shares of the Company) upon request to the Vice-President and Corporate Secretary, TransCanada PipeLines Limited, P.O. Box 54, Commerce Court West, Toronto, Ontario M5L 1C2.

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TransCanada PipeLines Limited

NOTICE OF 1995 ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

and

MANAGEMENT PROXY CIRCULAR

TransCanada PipeLines Limited

Dear Shareholder:

You are invited to attend the Annual and Special Meeting of the common shareholders of TransCanada PipeLines Limited which will be held at the Royal York Hotel, Toronto, Ontario, Canada on April 27, 1995 at 10:30 a.m. (Toronto time).

In addition to the regular business of receiving financial statements, electing directors and appointing auditors, you will be asked to consider and vote on a shareholder rights plan and on the Company's Key Employee Stock Incentive Plan (1995). The Management Proxy Circular contains detailed information about the shareholder rights plan and the Key Employee Stock Incentive Plan (1995).

Your participation in this meeting is very important to the Company, regardless of the number of shares you hold. If you are unable to attend in person, please complete, date, sign and promptly return the enclosed form of proxy in the envelope provided for this purpose. If you intend to be present at the meeting, you may nevertheless find it convenient to express your views in advance by returning the form of proxy duly completed.

Proxies are counted and tabulated by Montreal Trust Company of Canada, the transfer agent of the Company, in such a manner as to preserve the confidentiality of individual shareholder votes, except (a) where the shareholder has made a written comment on the proxy form which is clearly intended for management, (b) as necessary to meet legal requirements or (c) in the event of a proxy contest.

Following the custom of past meetings, we will review with you the business and affairs of the Company and our outlook for the future.

Sincerely yours,

G. J. Maier
Chairman of the Board

March 10, 1995

YOUR VOTE IS VERY IMPORTANT. THE COMPANY URGES YOU TO COMPLETE, DATE, SIGN AND RETURN TODAY THE ENCLOSED PROXY IN THE ENCLOSED ENVELOPE. IF YOUR SHARES ARE HELD IN THE NAME OF A BROKER OR NOMINEE, YOU MUST PROVIDE VOTING INSTRUCTIONS TO THE BROKER OR NOMINEE IN ORDER FOR YOUR SHARES TO BE REPRESENTED AT THE ANNUAL AND SPECIAL MEETING. FOR ASSISTANCE OR FURTHER INFORMATION, PLEASE CALL

TRANSCANADA'S INVESTOR RELATIONS DEPARTMENT
TOLL-FREE AT 1-800-361-6522 OR CALL
MONTREAL TRUST (403) 267-6555

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TransCanada PipeLines Limited

TransCanada PipeLines Tower
111 - 5th Avenue S.W.
Calgary, Alberta
Canada T2P 3Y6

NOTICE OF ANNUAL AND SPECIAL MEETING

NOTICE IS HEREBY GIVEN that the Annual and Special Meeting (the "Meeting") of the holders of common shares (the "common shares") of TransCanada PipeLines Limited will be held at the Royal York Hotel, 100 Front Street West, Toronto, Ontario, Canada on Thursday, April 27, 1995 at 10:30 a.m. (Toronto time) for the following purposes:

(1) to receive the consolidated financial statements for the year ended December 31, 1994 and the auditors' report thereon;

(2) to elect directors to serve for the ensuing year;

(3) to appoint auditors to hold office;

(4) to consider and, if deemed advisable, to pass, with or without variation, a resolution approving a shareholder rights plan adopted by the Board of Directors, the full text of which resolution is set out in Schedule "A" to the accompanying Management Proxy Circular;

(5) to consider and, if deemed advisable, to pass, with or without variation, a resolution approving the Key Employee Stock Incentive Plan (1995), the full text of which resolution is set out in Schedule "A" to the accompanying Management Proxy Circular; and

(6) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of common shares are invited to attend the Meeting. Shareholders of record at the close of business on March 10, 1995 will be entitled to vote at the Meeting except to the extent that a shareholder has transferred any common shares after that date and the new holder of such shares establishes proper ownership of the shares and requests, not later than 10 days before the Meeting, to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to complete, date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting. To be used at the Meeting, proxies must be received before 4:30 p.m. (Calgary time) on Tuesday, April 25, 1995 by our transfer agent, Montreal Trust Company of Canada, Stock Transfer Department, 411 - 8th Avenue S.W., Calgary, Alberta, Canada T2P 1E7 or be presented at the Meeting.

The 1994 Annual Report, the Management Proxy Circular and a form of proxy accompany this Notice of Meeting.

By Order of the Board of Directors,

Alison T. Love.

Alison T. Love
Corporate Secretary and
Associate General Counsel

Calgary, Alberta
March 10, 1995.

TransCanada PipeLines Limited

MANAGEMENT PROXY CIRCULAR

General Information

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by management of TransCanada PipeLines Limited (the "Company" or "TransCanada") to be used at the annual and special meeting and at any adjournment thereof (the "Meeting") of holders of common shares (the "common shares" or "shares") of the Company to be held in Toronto, Ontario on Thursday, April 27, 1995, at the place and for the purposes set out in the accompanying Notice of Annual and Special Meeting (the "Notice of Meeting").

It is anticipated that copies of this Circular and the form of proxy for shareholders will be first distributed to shareholders on or before March 27, 1995. The cost of soliciting proxies will be borne by the Company. While most proxies will be solicited by mail only, some shareholders may also be contacted by Company employees personally or by telephone. In addition, the Company will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of common shares registered in the names of such brokers, custodians, nominees and fiduciaries. The Company has retained The Proxy Solicitation Company Ltd., 55 University Avenue, Suite 1705, Toronto, Ontario, M5J 2H7, at a fee of approximately $15,000 plus out-of-pocket expenses, and Georgeson & Company Inc., Wall Street Plaza, New York, New York 10005, at a fee of approximately U.S. $15,000 plus out-of-pocket expenses, to aid in the solicitation of proxies from individual and institutional investors in Canada and the United States, respectively.

Unless otherwise stated, the information contained in this Circular is given as of March 10, 1995 and all dollar amounts set forth herein are in Canadian dollars.

Record Date for Notice of Meeting and Provisions Relating to Voting

The Board of Directors of the Company has fixed March 10, 1995 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share shown as registered in such holder's name on the list of shareholders prepared as of the close of business on the record date, unless a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership of the shares and requests the Corporate Secretary of the Company, not later than the close of business on April 17, 1995, to include such holder's name on the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 411 - 8th Avenue S.W., Calgary, Alberta T2P 1E7 and will be available for inspection at the Meeting.

Appointment of Proxy Holders

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 4:30 p.m. (Calgary time) on April 25, 1995, or must present a properly executed proxy at the Meeting. All shares represented by a properly executed proxy will be voted or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted "For" the

election of the persons nominated for election as directors, "For" the appointment of KPMG Peat Marwick Thorne, Chartered Accountants, as auditors, "For" the resolution ratifying and confirming the Shareholder Rights Plan and "For" the resolution approving the Key Employee Stock Incentive Plan (1995), in each case as referred to in this Circular.

The enclosed form of proxy, when properly signed, confers discretionary authority on the person or persons named to vote on any amendment to matters identified in the Notice of Meeting and on any other matter properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted at the discretion of the person or persons named therein. The persons named in the form of proxy are officers of the Company.

Revocability of Proxies

A shareholder may revoke a proxy by depositing an instrument in writing executed by such shareholder or such shareholder's attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of the Company, 111 - 5th Avenue S.W., Calgary, Alberta, T2P 3Y6, at any time up to and including the last business day preceding the day of the Meeting, or with the Chairman of the Meeting on the day of the Meeting.

Voting Shares and Principal Shareholders

The number of outstanding common shares entitled to be voted at the Meeting is 186,082,805. Each such share entitles the holder thereof to one vote and such shares are the only class of the Company's shares entitled to be voted at the Meeting.

To the knowledge of the directors and officers of the Company, based on information at March 10, 1995, no individual or corporation beneficially owned, directly or indirectly, or exercises control over, more than 5% of the outstanding common shares of the Company.

BUSINESS TO BE TRANSACTED AT THE MEETING

1. FINANCIAL STATEMENTS

The consolidated financial statements of the Company for the year ended December 31, 1994 and the report of the auditors thereon will be placed before the Meeting. Additional copies of the Annual Report (which contains the financial statements), in English or French, may be obtained from the Corporate Secretary of the Company upon request, and will be available at the Meeting.

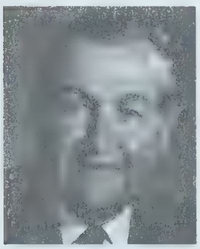
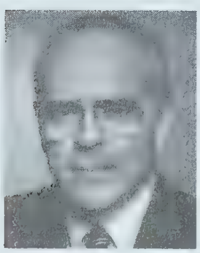
2. ELECTION OF DIRECTORS

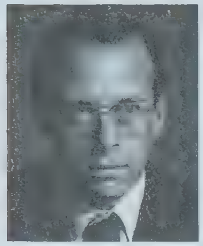
The Board of Directors has determined that the number of persons constituting the Board of Directors shall be 12. Except for Mr. Thompson and Ms. Witte, the nominees whose names are set forth below are all currently directors of the Company. Mr. Robert H. Jones and Mr. Robert Stollery, current directors, have reached the age limit for service on the Board of Directors and are therefore not eligible to stand for re-election. The Nominating Committee of the Board of Directors reviews annually the qualification of persons proposed for election to the Board of Directors and submits its recommendations to the Board for consideration. The persons nominated below are, in the opinion of the Board of Directors, and in the opinion of management, well qualified to act as directors for the ensuing year. Each nominee has established his or her eligibility and willingness to serve as a director if elected. The persons named in the form of proxy to act and vote on behalf of shareholders are officers of the Company and intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the form of proxy to withhold such vote. If, prior to the Meeting, any of the listed nominees becomes unable or unwilling to serve, the persons named in the form of proxy will have the right to use their discretion in voting for a properly qualified substitute. Each director elected will hold office until the next annual meeting or until his or her successor is duly elected or appointed.

INFORMATION CONCERNING THE DIRECTORS

General Information

Set forth below are the names of the 12 nominees, their municipalities of residence, all positions and offices with the Company and its significant affiliates held by them, their principal occupations or employment during the past five years, the year from which each director has continually served as a director of the Company and the number of shares of the Company owned by each of them or over which they exercise control or direction.

	Nominees for Election As Director [1]	Holdings of Securities of TransCanada [2]
	**Joseph Victor Raymond Cyr, O.C.**, of Montréal, Québec, is Chairman of the Board of Bell Canada and he is the former Chairman of the Board of BCE Inc. ("BCE") (management holding company). Prior to April 1992 Mr. Cyr was Chairman and Chief Executive Officer of BCE. Prior to November 1990 Mr. Cyr was Chairman, President and Chief Executive Officer of BCE. Mr. Cyr was also, from April 1989 to February 1992, Chairman of the Company. He has served as a director since January 1987.	4,000 common shares [3] 2,000 Equity Preferred Shares Series B
	**Robert Emmet Dineen, Jr.**, of New York, New York, is a partner of Shearman & Sterling, Attorneys-at-Law, New York, New York. He has served as a director since April 1989.	2,817 common shares
	**Wendy Dobson**, of Ashburn, Ontario, is a Professor, Faculty of Management and Director, Centre for International Business, University of Toronto. She has served as a director since April 1992.	500 common shares
	**Louis Yves Fortier, C.C., Q.C.**, of Montréal, Québec, is Chairman and a senior partner of Ogilvy Renault, Barristers and Solicitors, Montréal, Québec. Prior to January 1992 Mr. Fortier was Canada's Ambassador and Permanent Representative to the United Nations in New York. He has served as a director since April 1992.	1,500 common shares

Nominees for Election As Director [1]	Holdings of Securities of TransCanada [2]
 **Thomas Edward Kierans**, of Toronto, Ontario, is President and Chief Executive Officer of the C.D. Howe Institute, Toronto, Ontario (independent, non-profit research and educational institution). He has served as a director since April 1990.	3,200 common shares
 **The Hon. Donald Stovel Macdonald, P.C., C.C.**, of Toronto, Ontario, is counsel to McCarthy Tétrault, Barristers and Solicitors. Prior to September 1991 he served the Government of Canada as High Commissioner for Canada in London, England and from 1977 to 1991 he was a partner of McCarthy and McCarthy (now McCarthy Tétrault). Mr. Macdonald has served as a director since October 1991.	200 common shares
 **Gerald James Maier**, of Calgary, Alberta, is Chairman of the Company. Prior to April 1994 Mr. Maier was Chairman and Chief Executive Officer of the Company, prior to April 1993 he was Chairman, President and Chief Executive Officer of the Company and prior to February 1992 he was President and Chief Executive Officer of the Company. He has served as a director since December 1983.	472,805 common shares [4] 10,000 Equity Preferred Shares Series B
 **Harry George Schaefer**, of Calgary, Alberta, is Chairman of the Board of TransAlta Corporation (holding company), TransAlta Utilities Corporation (generation and sale of electric energy) and TransAlta Energy Corporation (independent power development), Calgary, Alberta. Prior to May 1993 Mr. Schaefer was also Chief Financial Officer of TransAlta Utilities Corporation and prior to May 1991 he was Deputy Chairman of the Board and Chief Financial Officer of TransAlta Utilities Corporation. He has served as a director since April 1987.	2,000 common shares

Nominees for Election As Director [1]		Holdings of Securities of TransCanada [2]
	**Allan Richard Taylor**, of Don Mills, Ontario, is a director of Royal Bank of Canada, Toronto, Ontario (Canadian chartered bank) ("Royal Bank"). Prior to January 1995 Mr. Taylor was Chairman of Royal Bank and prior to November 1994 he was Chairman and Chief Executive Officer of Royal Bank. He has served as a director since December 1983.	1,200 common shares
	**Joseph Dale Thompson**, of Edmonton, Alberta, is Chairman, President and Chief Executive Officer of PCL Construction Holdings Ltd., Edmonton, Alberta (general construction contractors). Prior to October 1993 Mr. Thompson was Vice-Chairman, President and Chief Executive Officer and prior to May 1991 he was Vice-Chairman and Chief Operating Officer of PCL Construction Holdings Ltd.	3,610 common shares [5]
	**George William Watson**, of Calgary, Alberta, is President and Chief Executive Officer of the Company. Prior to April 1994 Mr. Watson was President of the Company and prior to April 1993 he was Chief Financial Officer of the Company. He was appointed Chief Financial Officer in July 1990. From December 1988 to June 1990 Mr. Watson was President and Chief Executive Officer of Intensity Resources Ltd. He has served as a director since August 1993.	48,502 common shares [6] 3,000 Equity Preferred Shares Series B
	**Margaret Kent Witte**, of Bellevue, Washington is President and Chief Executive Officer of Royal Oak Mines Inc., Vancouver, British Columbia (mining company).	

Notes:

(1) All nominees are Canadian residents, with the exception of Mr. Dineen, Jr. and Ms. Witte who are United States residents. The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by each of the nominees. Except as indicated in the Notes below, the nominees have sole voting and dispositive power with respect to the securities listed above.

(2) As to each class of shares of TransCanada, the percentage of outstanding shares beneficially owned by any one director or nominee or by all directors, nominees and officers of the Company as a group (of which there are 39) does not exceed 1% of the class so owned.

(3) The shares listed include 1,000 shares beneficially owned by Mr. Cyr's wife. Mr. Cyr disclaims beneficial ownership of such shares.

(4) The shares listed include 50,705 shares owned directly by Mr. Maier, 102,500 shares acquired pursuant to the share purchase feature of KESIP (defined below), 283,000 shares as to which Mr. Maier has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP and 36,600 shares held by a privately owned company controlled by Mr. Maier. KESIP is defined and described under "Information Concerning the Compensation of Directors and Officers".

(5) The shares listed are held by a family trust, the beneficial owners of which are children of Mr. Thompson and Mr. Thompson's wife. Mr. Thompson disclaims beneficial ownership of such shares.

(6) The shares listed include 7,122 shares owned directly by Mr. Watson and 41,380 shares as to which Mr. Watson has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP.

Meetings of the Directors

During 1994, there were nine meetings of the Board of Directors.

Functions and Composition of Certain Committees of the Board of Directors

The Board of Directors has appointed as Standing Committees of the Board, the Audit and Environmental Committee, Executive Committee, Human Resources Committee and Nominating Committee.

The Audit and Environmental Committee, currently comprised of Messrs. Schaefer, Dineen, Fortier, Jones and Kierans and Ms. Dobson, none of whom is an officer of the Company, held five meetings during 1994. It reviews the fee arrangement and scope of the audit to be undertaken by the independent auditors. It reviews the financial statements of the Company, the independent auditors' report thereon and the activities and recommendations of the Company's internal auditors. It also reviews whether the Company's environmental practices and procedures comply with applicable legislation and advises and makes recommendations to the Board of Directors on the Company's environmental practices and procedures.

The Executive Committee, currently comprised of Messrs. Maier, Cyr, Macdonald, Taylor and Watson, did not meet in 1994. It has, to the extent permitted by law, the full power and authority of the Board of Directors to act on any matters specifically delegated to it by the Board of Directors, and it reviews with the President and Chief Executive Officer significant business activities and plans of the Company.

The Human Resources Committee, currently comprised of Messrs. Taylor, Cyr, Kierans and Stollery, none of whom is an officer of the Company, held five meetings during 1994. The Human Resources Committee annually reviews the performance of the officers of the Company and its major subsidiaries and makes recommendations to the Board of Directors relating to senior management succession. It approves the compensation arrangements for senior management including those benefits which are granted under KESIP. It has the authority to designate the employees of the Company, including the salaried directors and officers of the Company, who may participate in KESIP, to fix the extent of such participation, to determine (subject to certain limitations) the purchase price of shares to be allocated to KESIP participants, to determine the conditions on which stock options may be awarded to KESIP participants and to determine certain other matters in connection with the proper administration of KESIP.

The Nominating Committee, currently comprised of Messrs. Cyr, Macdonald, Maier, Jones and Stollery, held three meetings during 1994. It reviews the qualifications of persons proposed for election to the Board of Directors and submits its recommendations for Board consideration and decision. It also makes recommendations concerning the nomination of directors previously elected, the composition of the various committees of the Board of Directors, the remuneration and the governance of the Board of

Directors. In April 1995 the name of this committee will be changed to the "Governance Committee" to reflect the agreement of the Directors that this Committee assume responsibility for developing the Company's approach to corporate governance issues.

INFORMATION CONCERNING THE COMPENSATION OF DIRECTORS AND OFFICERS

Compensation of Directors

For the financial year ended December 31, 1994, the Company paid each director who was not an officer of the Company as follows: an annual retainer fee of $15,000; an annual fee of $2,500 for each Committee of the Board of Directors of which he or she was a member; and an additional fee of $2,000 for each Committee of the Board of Directors of which he or she was Chairman. The Company also paid each such director a fee of $1,000 for attendance at each meeting or adjourned meeting of the Board of Directors or a Committee thereof and reimbursed the director for out-of-pocket expenses incurred in attending such meetings. Directors who are also officers of the Company were not paid directors' fees, with the exception of the Chairman of the Company, Mr. Maier, who, subsequent to the date of his retirement as Chief Executive Officer of the Company, has been paid a retainer fee of $200,000 per annum for serving in his capacity as Chairman, in addition to the fees referred to above.

Compensation of Officers

Description of Plans

A) Key Employee Stock Incentive Plan

General Information

In 1979 the Company established the Key Employee Stock Incentive Plan ("KESIP"). KESIP included both a stock option feature and a share purchase feature. As the ability of the Company to award options under KESIP expired in December 1994, the Company proposes to amend and extend KESIP and re-establish it as the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)"), subject to shareholder approval at the Meeting. KESIP (1995) which is referred to on page 26 of this Circular provides for the stock option feature to be continued, but not the share purchase feature. All officers of the Company were members of KESIP. Directors who were not employees of the Company were not eligible to participate in KESIP. There have been no awards under the share purchase feature of KESIP since 1987. The maximum number of common shares which was subject to KESIP was 15,000,000 common shares, of which, at December 31, 1994, approximately 4,213,240 common shares were issued. At December 31, 1994, 2,311,760 common shares are issuable under unexpired options. Not more than 1,200,000 shares could be set aside and reserved for issuance under KESIP annually.

Share Purchase Feature

As stated above, KESIP (1995) does not provide for the share purchase feature to be continued. Under the share purchase feature of KESIP, Montreal Trust, as Trustee, purchased authorized but unissued common shares of the Company for the benefit of key employees of the Company or any wholly-owned subsidiary who were selected and agreed to participate in KESIP. Such purchases were funded by an interest-free loan provided by the Company or such subsidiary. The participant agreed to purchase from the Trustee shares allocated to such participant at the price paid by the Trustee for such shares. The outstanding loans to the employee applicable to such purchases are payable no later than the last business day preceding the tenth anniversary of the date the shares were allocated to the participant or earlier following the termination of employment of a participating employee at dates which vary depending upon the reasons for the termination of employment. During the period in which the loan is unpaid, the shares are held as security for the payment of the loan.

If a takeover bid is made which would result in the offeror owning, in the aggregate, in excess of 80% of the outstanding common shares and other voting securities of the Company, a participant is entitled to prepay the loan for all common shares held by the Trustee for such participant with a view to tendering such common shares to the offeror. Should the participant not exercise such right of prepayment, the Trustee may repurchase from the participant all such common shares at the same price per common share as the participant originally agreed to pay, less any balance due the Trustee.

Stock Option Feature

The stock option feature of KESIP was administered by the Human Resources Committee of the Board of Directors. Options to purchase common shares of the Company were awarded to KESIP participants. The exercise price was determined by the Human Resources Committee at the time the option was awarded. The exercise price determined for stock options granted in 1994 was the average closing price of the common shares of the Company on the five trading days immediately preceding the award date. Twenty percent of the common shares subject to an option are eligible for purchase upon each of the first five anniversary dates following the award date of the option. At the time of awarding an option, the expiry date (the last day on which the option is exercisable, being a day not later than 10 years from the date on which it was granted) was established by the Board of Directors or the Human Resources Committee. Options awarded under KESIP terminate on their stated expiry date or earlier following the termination of employment of a participating employee at dates which vary depending upon the reason for the termination of employment.

B) **Incentive Compensation Program**

In 1987, the Company adopted an Incentive Compensation Program whereby officers and senior management employees of the Company and its subsidiaries are eligible to receive annual cash awards in lieu of a certain portion of salary increases. The cash awards are determined during the first quarter of the financial year following the financial year to which the awards relate. The awards can range from nil to preset limits thus placing a portion of the compensation at risk each year. The intention of the plan is to link closely participants' overall cash compensation to the performance of the Company and its business units as well as to their respective individual performance. By doing so, officers and senior management are encouraged to work towards the attainment of overall Company and business unit goals. Eligibility for participation in and the criteria used to determine amounts payable under the Incentive Compensation Program for officers are determined by the Human Resources Committee.

C) **Employee Savings Plan**

The Employee Savings Plan was introduced by the Company in 1979 to provide all employees of the Company with a means to participate in the profit performance of the Company. All current officers participate in this plan on the same basis as all other TransCanada employees. Under a flexible benefit plan established in 1993, each employee is entitled to a contribution by the Company of an amount equal to 3% of that employee's salary for the purchase of common shares, and additional amounts of up to approximately 3.5% of the employee's salary may be contributed by the Company depending on the employee's desired use of flexible benefit credits. The shares and the dividends thereon are allocated to the employees' accounts once a year. The vesting of the shares allocated under the Employee Savings Plan depends on the number of credited years service an employee has with the Company. After five years credited service all shares allocated to an employee are vested.

SUMMARY COMPENSATION TABLE

The following table provides a summary of the remuneration earned by the Chief Executive Officer, the former Chief Executive Officer and the four other most highly compensated policy-making executive officers of TransCanada (collectively, the "Named Executive Officers") for services rendered in all capacities during the financial years ended December 31, 1994, 1993 and 1992. Specific aspects of this compensation are dealt with in further detail in the following tables.

		Annual Compensation			Long Term Compensation	
					Awards	
Name and Principal Position of the Named Executive Officers	Year	Salary $	Bonus[a] $	Other Annual Compensation[b][c] $	Securities Under Options Granted[d] (#)	All Other Compensation[b][e] $
G. W. Watson[f] President and Chief Executive Officer	1994	$441,389	$130,000	$ 45,799	45,100	$ 48,935
	1993	310,729	100,000	31,135	27,500	58,242
	1992	265,000	67,000		18,200	
G. J. Maier[g] Chairman of the Board	1994	213,336	78,000	424,694	0	231,424
	1993	620,000	240,000	89,857	52,500	93,027
	1992	600,000	230,000		58,300	
G. M. Hugh Chief Operating Officer	1994	305,000	80,000	54,650	17,600	33,975
	1993	291,000	73,000	53,990	17,400	42,439
	1992	277,000	70,000		19,000	
R. A. M. Young Senior Vice-President, Law	1994	244,000	75,000	25,870	16,900	20,125
	1993	235,000	59,000	20,309	14,100	15,000
	1992	222,000	58,000		15,300	
A. J. Epp[h] Senior Vice-President	1994	229,000	70,000	15,531	15,900	0
	1993	75,000	17,000	0	21,200	0
	1992	0	0		0	
R. J. Reid[i] Senior Vice-President	1994	235,532	60,000	30,721	14,200	4,500
	1993	257,960	55,904	35,191	12,000	0
	1992	227,160	59,650		12,900	

Notes:

(a) Amounts referred to in this table as "Bonus" are paid pursuant to the Company's Incentive Compensation Program (described above under "Description of Plans — Incentive Compensation Program"). These amounts are paid in cash in the year following the year in which they were earned.

(b) In accordance with the transitional provisions of the Ontario Securities Commission's revised rules on disclosure of executive compensation in proxy statements, amounts of "Other Annual Compensation" and "All Other Compensation" have not been included for the 1992 financial year.

(c) Perquisites and other personal benefits do not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus for any of the Named Executive Officers. The amounts in this column include the value of salary paid in lieu of vacation, the imputed interest benefit from loans made pursuant to the share purchase feature of KESIP (described above under "Description of Plans — Key Employee Stock Incentive Plan"), and TransCanada's contributions under the Employee Savings Plan.

(d) The amounts in this column reflect the number of stock options granted to each of the Named Executive Officers in each of the years referred to. The options have been granted under the stock option feature of KESIP.

(e) The amounts in this column include amounts paid to the Named Executive Officers in 1994 by subsidiaries and affiliates of TransCanada (including directors' fees paid by affiliates and amounts paid for serving on management committees of partnerships in which TransCanada holds an interest) and, in Mr. Maier's case, his retainer for acting as Chairman of the Company, fees for serving as a director of the Company, and a retiring allowance paid to him on his retirement as Chief Executive Officer of the Company.

(f) G. W. Watson was appointed Chief Executive Officer in April 1994, prior to which he was President.

(g) G. J. Maier was Chief Executive Officer of the Company during all of 1992, 1993 and up to April of 1994, at which time he retired. He is now the Chairman of the Board of the Company.

(h) A. J. Epp was appointed as an officer of the Company in September 1993.

(i) R. J. Reid was appointed as Senior Vice-President of the Company in January 1994, prior to which he was President of Iroquois Pipeline Operating Company, a U.S. subsidiary of the Company. Prior to June 1, 1994 Mr. Reid was paid in U.S. dollars and the amounts referred to reflect conversion rates in effect at the times of such payments.

OPTIONS GRANTED DURING THE MOST RECENTLY COMPLETED FINANCIAL YEAR

The following table sets forth the grants under the stock option feature of KESIP, during the financial year ended December 31, 1994, to each of the Named Executive Officers. See "Key Employee Stock Incentive Plan — Stock Option Feature" for a description of the Plan.

Name of Named Executive Officer	Number of Common Shares Under Options Granted[(a)]	% of Total Options Granted to Employees in 1994	Exercise Price ($/share)[(b)]	Market Value of Shares Underlying Options on the Date of Grant ($/share)	Expiration Date
G. W. Watson	45,100	8.99	$17.375	$17.250	December 2, 2004
G. J. Maier	NIL	N/A	N/A	N/A	N/A
G. M. Hugh	17,600	3.51	17.375	17.250	December 2, 2004
R. A. M. Young	16,900	3.37	17.375	17.250	December 2, 2004
A. J. Epp	15,900	3.17	17.375	17.250	December 2, 2004
R. J. Reid	14,200	2.83	17.375	17.250	December 2, 2004

Notes:

(a) Twenty per cent of the shares under option are purchasable on and after each of the first five anniversary dates of the granting of the option.

(b) The exercise price is equal to the average closing price of TransCanada's common shares on The Toronto Stock Exchange on the five trading days immediately prior to the grant of the options.

AGGREGATED OPTION EXERCISES DURING 1994 FINANCIAL YEAR AND 1994 FINANCIAL YEAR-END OPTION VALUES

The following table summarizes, for each of the Named Executive Officers, the number of stock options, if any, exercised during the financial year ended December 31, 1994, the aggregate value realized upon exercise and the total number of unexercised options, if any, held at December 31, 1994. The value realized on exercise is the difference between the closing price of the underlying common shares on the exercise date and the exercise price of the option. The value of unexercised "in-the-money" options at the financial year end is the difference between the exercise price and the closing price of TransCanada's common shares on The Toronto Stock Exchange on December 31, 1994 which was $17.125 per share. These amounts, unlike the amounts shown in the column "Aggregate Value Realized", have not been and may never be realized. The underlying options have not been and will not necessarily be exercised and the actual gains, if any, on exercise will depend on the value of TransCanada's common shares on the date of exercise.

Name of Named Executive Officer	Number of Shares Acquired on Exercise[(a)] (#)	Aggregate Value Realized[(b)] ($)	Unexercised Options at FY-End[(c)] (#)		Value of Unexercised in-the-Money Options at FY-End[(d)] ($)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
G. W. Watson	0	0	41,380	89,420	$ 7,600	$1,900
G. J. Maier	0	0	283,000	0	105,750	0
G. M. Hugh	0	0	47,180	52,920	10,062	0
R. A. M. Young	0	0	35,240	47,560	800	200
A. J. Epp	0	0	4,240	32,860	0	0
R. J. Reid	0	0	34,040	37,460	20,010	0

Notes:

(a) These numbers indicate, for each of the Named Executive Officers, the number of shares acquired pursuant to the exercise of options during the most recently completed financial year.

(b) These amounts indicate the net value realized on the exercise of stock options.

(c) Options were issued during the years 1989 to 1994.

(d) These amounts do not take into account unexercised options that were not "in-the-money" on December 31, 1994.

INDEBTEDNESS OF DIRECTORS, EXECUTIVE OFFICERS AND SENIOR OFFICERS UNDER SECURITIES PURCHASE PROGRAMS

As at March 10, 1995, the aggregate amount of indebtedness to TransCanada incurred in connection with the purchase of securities of TransCanada by all directors, officers, employees and former directors, officers and employees of TransCanada or any of its subsidiaries amounted to $6,945,199.

The following table sets forth the indebtedness incurred by directors, executive officers and senior officers for the purchase of securities of TransCanada.

Name and Principal Position	Involvement of Issuer or Subsidiary	Largest Amount Outstanding During the Financial Year Ended Dec. 31, 1994[a] $	Amount Outstanding as at March 10, 1995 $	Financially Assisted Securities Purchases During Year Ended Dec. 31, 1994 #	Security for Indebtedness[b]	
G. J. Maier Chairman	TransCanada as Lender	$1,227,362	$1,204,547	NIL	TransCanada Talisman	102,500 0
G. M Hugh Chief Operating Officer	TransCanada as Lender	84,298	66,832	NIL	TransCanada Talisman	0 969
G. J. Couper President, Western Gas Marketing Limited	TransCanada as Lender	160,064	147,806	NIL	TransCanada Talisman	9,740 324
R. J. Reid Senior Vice-President	TransCanada as Lender	320,364	242,079	NIL	TransCanada Talisman	17,300 575
M. Dumin Senior Vice-President	TransCanada as Lender	100,493	98,446	NIL	TransCanada Talisman	7,080 234
R. B. Hodgins Senior Vice-President and Chief Financial Officer	TransCanada as Lender	20,528	19,872	NIL	TransCanada Talisman	1,120 169
R. T. Smith Vice-President and Controller	TransCanada as Lender	109,248	76,198	NIL	TransCanada Talisman	4,920 0
J. W. Stinson Vice-President, Human Resources	TransCanada as Lender	4,168	4,168	NIL	TransCanada Talisman	0 125

Notes:

(a) The securities in respect of which the above indebtedness was incurred were purchased during the years 1985 to 1987 and were common shares of TransCanada, pursuant to the terms of the share purchase feature of KESIP. Reference is made to "Key Employee Stock Incentive Plan" on page 10. The loans are interest-free.

(b) During the period in which the loan is unpaid, the shares are held as security for the payment of the loan. This column reflects the aggregate number of common shares held as security for the loan amount as at March 10, 1995. In 1989, pursuant to a Plan of Arrangement, the shares of Encor Inc. ("Encor"), formerly a subsidiary of the Company, were distributed to the shareholders of the Company and accordingly certain KESIP participants owned both TransCanada and Encor shares. In 1993, pursuant to another Plan of Arrangement, the shares of Encor were acquired by Talisman Energy Inc. ("Talisman") and the companies were amalgamated. As a result, some KESIP participants hold both TransCanada and Talisman shares which are held as security for the loans.

Pension and Retirement Benefits

The Named Executive Officers and all other employees participate in the Company's non-contributory defined benefit pension plan (the "Pension Plan"). Annual Pension Plan benefits are integrated with Canada Pension Plan benefits and are based on between 1.25% and 1.75% of a person's final average plan earnings times the total number of years in the Pension Plan ("Credited Pensionable Service"). Final average plan earnings are defined as the average annual earnings during the 36 consecutive months when earnings were highest. The Pension Plan benefits are subject to a ceiling imposed by the Income Tax Act of $1,722 per year for each year of Credited Pensionable Service.

Under an Executive Supplemental Retirement Benefits Plan ("SRP") which was amended in 1994, all officers of the Company are entitled to supplementary pension benefits. In respect of credited service prior to May 1990, the annual pension benefit is equal to 3.33% of final average plan earnings for each of the first 15 years of service with the Company and 2% for each of the next 10 years. These pension benefits are inclusive of benefits payable under the Pension Plan and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to those officers with credited service granted prior to May 1990 under the SRP is 70% of final average plan earnings at the date of retirement, less the amount payable under the Canada Pension Plan. In respect of credited service on and after May 1990, the annual pension benefit is equal to the amount calculated using the formula contained in the Pension Plan without reference to the ceiling imposed by the Income Tax Act referred to above.

Under both the Pension Plan and SRP, a participant will receive the following automatic form of pension:

(a) in respect of credited service prior to January 1, 1990, upon retirement, a monthly pension payable for life with 60% continuing to the participant's surviving spouse; and

(b) in respect of credited service on and after January 1, 1990, upon retirement, a monthly pension as described in (a) above, and for unmarried participants or married participants who have so elected and with spousal consent have waived the automatic form of pension, a monthly pension payable for life with payments to the participant's estate guaranteed for the balance of 10 years if the participant dies within 10 years of retirement.

In lieu of the normal form of pension, a participant may elect optional forms of pension payment.

Assuming that the executive officers named below remain employed by the Company until age 65 and that the Pension Plan and the SRP remain in force substantially in their present forms, such officers will have approximately the following listed number of years of Credited Pensionable Service: G. W. Watson — 22 years; G. M. Hugh — 42 years; R. A. M. Young — 14 years; A. J. Epp — 11 years; and R. J. Reid — 40 years. Mr. Maier retired in April 1994. At that time he had 17 years of Credited Pensionable Service and is entitled to a pension of $416,865 per year as a result of his appointment as an officer prior to May 1990.

The following table sets out estimated annual pension benefits (based on the "joint and 60% survivor" method) payable for credited service under the Pension Plan and the SRP (excluding amounts payable under the Canada Pension Plan) in specified final average plan earnings and years of Credited Pensionable Service classifications:

Final Average Plan Earnings	Years of Credited Pensionable Service					
	15	20	25	30	35	40
$ 200,000	$ 50,000	$ 67,000	$ 83,000	$100,000	$117,000	$133,000
300,000	76,000	102,000	127,000	152,000	178,000	203,000
400,000	102,000	137,000	171,000	205,000	239,000	273,000
500,000	129,000	172,000	214,000	257,000	300,000	343,000
600,000	155,000	207,000	258,000	310,000	362,000	413,000
700,000	181,000	242,000	302,000	362,000	423,000	483,000
800,000	207,000	277,000	346,000	415,000	484,000	553,000
900,000	234,000	312,000	389,000	467,000	545,000	623,000
1,000,000	260,000	347,000	433,000	520,000	607,000	693,000

Note: Average plan earnings include base salary and targeted incentive payments under the Incentive Compensation Program.

TERMINATION OF EMPLOYMENT OR CHANGE OF CONTROL AGREEMENTS

The Company has entered into agreements with its executive officers which would apply in the event of a change of control of the Company. For information with respect to these agreements, see "Description of Plans — Key Employee Stock Incentive Plan".

REPORT ON EXECUTIVE COMPENSATION BY THE HUMAN RESOURCES COMMITTEE OF THE BOARD OF DIRECTORS

The Human Resources Committee of the Board of Directors (the "Committee") is composed of four directors who are neither officers nor former officers of the Company. The Committee is charged with the responsibilities outlined above under "Functions of Certain Committees of the Board of Directors". The Committee reports to the Board of Directors all material matters considered and approved by it.

When determining the level of executive compensation, the Committee utilizes data prepared by independent compensation consultants. Competitive compensation data for a comparator group comprised of approximately 25 large Canadian companies is referenced. These companies are of similar size and complexity as the Company and are representative of the types of organizations with which the Company must compete for its executive officers.

The objectives of the compensation program for the executive officers of the Company are to attract, retain and appropriately motivate the highly qualified workforce necessary to promote the achievement of the Company's annual and longer-term business objectives; and to reinforce the commitment of the executive officers to maximize shareholder value. In order to achieve these objectives, the total compensation program for executive officers has three components: base salary, an annual incentive program in the form of cash payments, and a long-term, equity-based incentive plan. All three components are performance-based.

When determining how the Company's compensation program compares against the competitive compensation data, the Committee considers it appropriate that considerable emphasis should be placed on actual performance achievements as measured against pre-established corporate and business unit goals as well as individual executive officer performance management objectives.

Executive officers are paid base salaries which are within salary ranges established for each position. Because executive officers participate in the Company's Incentive Compensation Program, which is described in further detail above under "Description of Plans — Incentive Compensation Program" (the "I.C.P."), their base salaries are not permitted to exceed the mid-point of their salary range such that if a commendable level of performance is achieved under the I.C.P. (i.e. superior performance), total cash compensation, including payments under the I.C.P., will reach that of the top 25% of the comparator group of companies. If competent levels of performance are achieved under the I.C.P., total cash compensation will be lower.

In 1994 a decision was made that in order to de-emphasize fixed compensation in the form of base salary and place greater emphasis on variable performance-based compensation, the mid-points of the salary ranges for the executive group should be reduced.

Coincident with the reduction to the base salary opportunity, a greater emphasis was placed on the Company's I.C.P., one of the two variable, performance-based components of the executive group's total compensation program. The I.C.P. links the annual cash compensation levels and the achievements of annual individual, corporate and business unit performance goals by placing a portion of overall cash compensation at risk, to be achieved only if goals are achieved. As a result of the reduction of the mid-points of the salary ranges for the executive group, the at risk payments under the modified I.C.P. now typically represent up to approximately 30% to 40% of the cash compensation (base salary plus I.C.P.) opportunity at the executive officer level. The individual, corporate and business unit goals are determined annually in conjunction with the Board's approval of the Company's strategic and operating plans. Quantitative corporate and business unit goals include such factors as return on common equity, net income per common share, operating income, and sales volumes. In 1994, total shareholder return was added as another important corporate goal. Qualitative corporate goals include developing strategic business plans which will result in future corporate growth and increased shareholder value, and improving overall operational performance on matters such as reliability and quality of service to customers, safety, environmental compliance, and human resource development to achieve continuous quality and productivity improvement.

Awards under the I.C.P. are payable when performance achievements are judged to be competent or higher. A competent rating is received when the pre-established individual, corporate, and business unit performance goals are met at the target level. If performance achievements exceed the target level and performance is judged at a commendable level or higher, the I.C.P. allows for higher incentive payments than if performance is judged at a competent rating. To be assessed as commendable or higher is a difficult achievement, attainable only when performance is truly superior. In 1994, awards to executive officers as a group reflected the fact that the Company was considered to have met its performance targets, but not at a level judged to have been commendable.

The Company's long-term incentive plan, the Key Employee Stock Incentive Plan (KESIP), described in further detail above under "Description of Plans — KESIP", is the second variable, performance-based component of the executive group's total compensation program. KESIP is intended to reinforce executive officer commitment to the long-term growth in profitability and shareholder value by including stock option awards in the total compensation program. Outstanding option awards held by individuals at the time new awards are made to those individuals are not considered and limits are placed on the total shares that can be reserved for issuance under KESIP. The size of the annual stock option awards to the individual officers is determined through consideration of their individual performance achievements, their level of responsibility, authority and overall importance to the current welfare of the Company, and the degree to which their long-term potential and contribution will be key to the long-term success to the Company. With stock option awards, executives receive gains only if the stock price improves subsequent to the date of grant. As the ability to grant options under KESIP has now expired, the Company is proposing to continue the stock option feature of KESIP under KESIP (1995) which is described below under "Approval of KESIP (1995)".

If the corporate, business unit and individual officer performance targets are met, and based on certain share price growth assumptions for the KESIP component, it is intended that 76% of the total executive officer compensation program relate to the base salary component, 12% to the annual ICP, and 12% to the long-term KESIP. The more senior the officer, the more closely compensation is tied to the actual performance of the Company. Accordingly, a higher proportion of the total compensation package is at risk under the I.C.P. and KESIP programs for the Named Executive Officers.

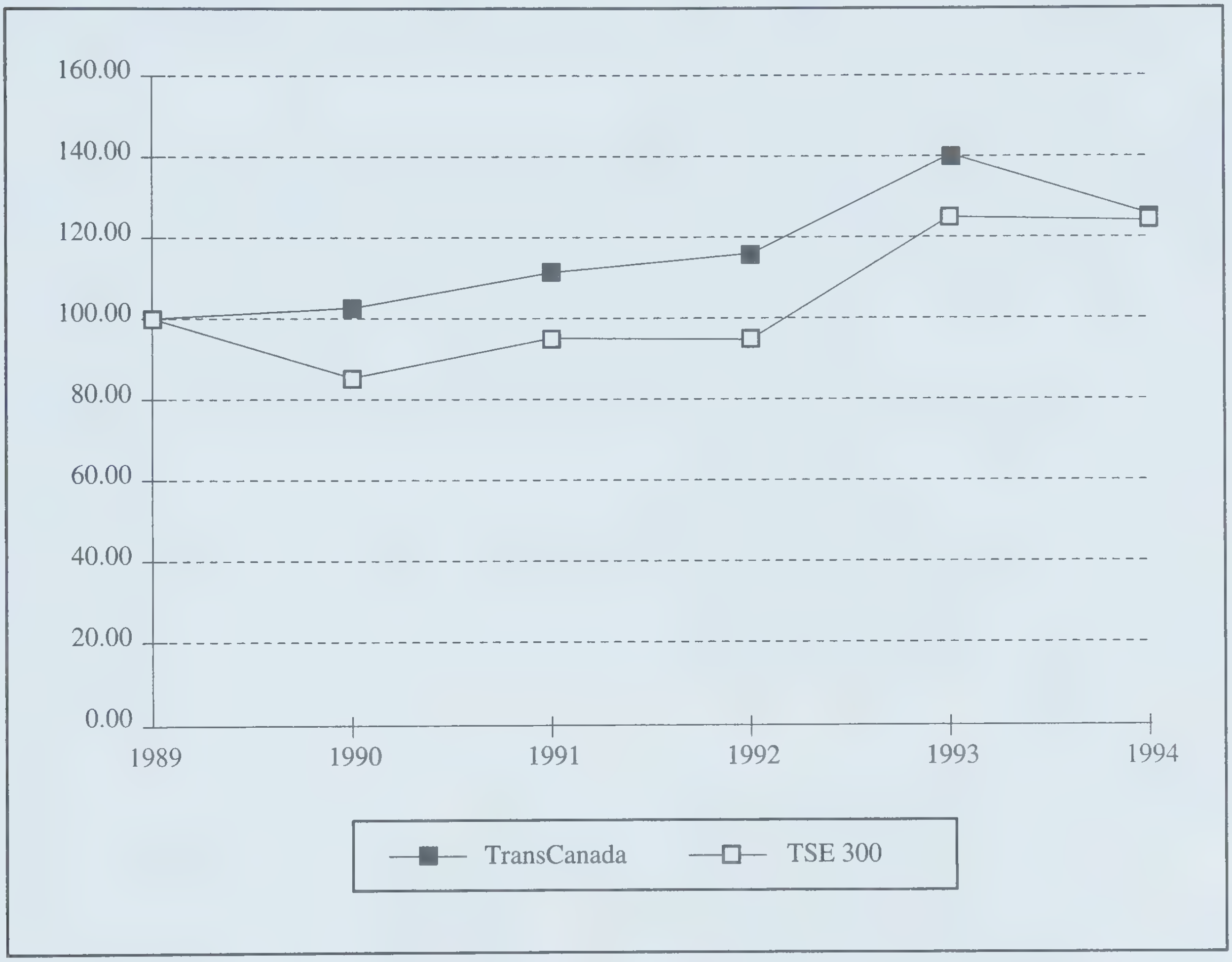
Mr. Maier retired as Chief Executive Officer in April 1994, and Mr. Watson was appointed Chief Executive Officer at that time in addition to his responsibilities as President. Mr. Watson's compensation program has the same components as those described for the other members of the executive officer group: base salary, the annual I.C.P., and the long-term KESIP. While he was Chief Executive Officer Mr. Maier's compensation program had these same components. Mr. Watson's compensation program is established, and Mr. Maier's compensation program was established, with reference to the same comparator group described above. The Committee makes recommendations to the Board of Directors regarding the Chief Executive Officer's compensation on the same performance-related basis as for the other executive officers. Relative to the other executive officers, when determining the Chief Executive Officer's compensation, greater emphasis is placed on the performance of the Company as measured against the pre-established quantitative and qualitative goals. No specific weighting is assigned to the quantitative and qualitative factors when recommending a base salary and KESIP award for the Chief Executive Officer; under the I.C.P., 60% of the award is directly related to the quantitative and qualitative corporate achievements and 40% to the individual achievements. Effective January 1, 1994, in his position as Chief Executive Officer, Mr. Maier's annual salary was established at $640,000. Effective with Mr. Watson's appointment to the position of President and Chief Executive Officer on April 22, 1994, Mr. Watson's annual base salary was set at $460,000, as compared to a previous annual salary rate of $400,000 which was established for him effective January 1, 1994 in his position as President. The Committee recognized that this base salary rate for Mr. Watson was below the levels paid to Chief Executive Officers in the comparator group of companies, but considered it an appropriate rate for a new appointment to the position. In recognition of their contribution to the Company's successful performance during 1994 and the continued strengthening of the Company's strategic positioning, I.C.P. payments of $78,000 and $130,000 were approved in February 1995 (relative to 1994), to Mr. Maier and Mr. Watson, respectively and a grant of 45,100 stock options to Mr. Watson was made in December 1994 under the terms of KESIP.

Submitted by the Human Resources Committee of the Board of Directors:

Allan R. Taylor (Chairman)
J. V. Raymond Cyr
Thomas E. Kierans
Robert Stollery

PERFORMANCE GRAPH

The following chart compares TransCanada's five-year cumulative total shareholder return to the TSE 300 composite index (assuming reinvestment of dividends and considering a $100 investment on December 31, 1989 in TransCanada's common shares):



	1989	1990	1991	1992	1993	1994	Compound Annual Growth
TransCanada........	100.0	104.4	112.1	117.8	140.5	125.7	4.69%
TSE 300	100.0	85.2	95.4	94.1	124.7	124.5	4.47%

3. APPOINTMENT OF AUDITORS

The Board of Directors recommends that KPMG Peat Marwick Thorne, Chartered Accountants, be reappointed as the Company's auditors to hold office until the close of the next annual meeting. This firm has served as the auditors of the Company since 1956.

Representatives of KPMG Peat Marwick Thorne will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

4. SHAREHOLDER RIGHTS PLAN

Shareholders will be asked at the Meeting to consider and, if deemed advisable, to approve a resolution, the text of which is set forth in Schedule "A" to this Circular (the "Shareholder Rights Plan Resolution"), to ratify the adoption of the Shareholder Rights Plan Agreement (the "Rights Plan"). The full text of the Rights Plan is set forth in Schedule "B" to this Circular.

The Board of Directors has determined that the Rights Plan is in the best interests of the Company and unanimously recommends that the shareholders vote in favour of the Rights Plan.

The Rights Plan was unanimously adopted by the Board of Directors on December 2, 1994, became effective on that day and will continue in effect if the shareholders approve the Shareholder Rights Plan Resolution.

In considering whether to adopt the Rights Plan, the Board of Directors considered the current legislative framework in Canada governing take-over bids. Under provincial securities legislation, a take-over bid generally means an offer to acquire voting or equity shares of a corporation that, together with shares already owned by the bidder and certain parties related thereto, amount to 20% or more of the outstanding shares.

The existing legislative framework for take-over bids in Canada presents the following concerns for shareholders:

(a) *Time*

Current legislation permits a take-over bid to expire 21 days after it is initiated. The Board of Directors is of the view that this is not sufficient time to permit shareholders to consider a take-over bid and make a reasoned and unhurried decision.

(b) *Pressure to Tender*

A shareholder may feel compelled to tender to a take-over bid which the shareholder considers to be inadequate, out of a concern that in failing to do so, the shareholder may be left with illiquid or minority discounted shares. This is particularly so in the case of a partial take-over bid (a bid for less than all shares), where the bidder wishes to obtain a control position but does not wish to acquire all of the shares. The Rights Plan provides a shareholder with an approval mechanism which is intended to ensure that a shareholder can separate the decision to tender from the approval or disapproval of a particular take-over bid.

(c) *Unequal Treatment*

Shareholders of the Company may be vulnerable to discriminatory acquisition tactics because the different securities laws in Canada and the United States, the principal trading markets for the Company's common shares, could form the basis for unequal treatment of shareholders. The Rights Plan is intended to address this jurisdictional gap and to ensure equal treatment of shareholders regardless of country of residence or size of holdings. The Board of Directors was also concerned that a person seeking such control might attempt, among other things, a gradual accumulation of shares in the open market; the accumulation of a large block of shares

in a highly compressed period of time from institutional shareholders and professional speculators or arbitrageurs; a partial offer that unfairly pressures shareholders; or an offer for any or all of the Company's common shares at what the Board of Directors considers to be less than full and fair value. The Rights Plan effectively prohibits the acquisition of more than 20% of the Company's common shares in such a manner. The Rights Plan is designed to encourage any bidder to provide shareholders with equal treatment in a take-over bid and full value for their investment.

Purpose

The purpose of the Rights Plan is to give adequate time for shareholders of the Company to properly assess the merits of a bid without undue pressure and to allow competing bids to emerge. The Rights Plan is designed to give the Board of Directors time to consider alternatives to allow shareholders to receive full and fair value for their common shares. The adoption of the Rights Plan does not affect the duty of the Board of Directors to act honestly and in good faith with a view to the best interests of TransCanada and its shareholders.

The issuance of the Rights (as defined below) will not in any way alter the financial condition of TransCanada. The issuance is not of itself dilutive, will not affect reported earnings per share and will not change the way in which shareholders would otherwise trade common shares. By permitting holders of Rights other than an "Acquiring Person" (as defined below) to acquire shares of TransCanada at a discount to market value, the Rights may cause substantial dilution to a person or group that acquires 20% or more of the voting securities of TransCanada other than by way of a Permitted Bid (as defined below) or other than in circumstances where the Rights are redeemed or the Board of Directors waives the application of the Rights Plan.

The Rights Plan should provide adequate time for shareholders to assess a bid and to permit competing bids to emerge. It also gives the Board of Directors sufficient time to explore other options. A potential bidder can avoid the dilutive features of the Rights Plan by making a bid that conforms to the requirements of a Permitted Bid.

To qualify as a Permitted Bid, a take-over bid must be made for all common shares and must be open for 60 days after the bid is made. If at least 50% of the common shares held by persons independent of the bidder are deposited or tendered pursuant to the bid and not withdrawn, the bidder may take up and pay for such shares. The bid must then remain open for a further period of 10 clear business days on the same terms.

The requirements of a Permitted Bid enable each shareholder to make two separate decisions. First, a shareholder will decide whether the bid or any competing bid is adequate on its own merits; in making this decision the shareholder need not be influenced by the likelihood that the bid will succeed. If there is sufficient support such that at least 50% of common shares have been tendered, a shareholder who has not already tendered to that bid or to a competing bid will have a further 10 business days to decide whether to withdraw his or her common shares from a competing bid, if any, and whether to tender to the bid.

Since 1988, over 75 Canadian companies have adopted a rights plan. Of the rights plans adopted by Canadian companies and submitted to shareholders for approval all but one have reportedly been confirmed or ratified by a majority of the shares voted. Over 1,200 companies in the United States have adopted a rights plan.

Summary

The following is a summary of the principal terms of the Rights Plan which is qualified in its entirety by reference to the text of the Rights Plan attached as Schedule "B" to this Circular.

Effective Date

The effective date of the Rights Plan is December 2, 1994 (the "Effective Date").

Term

The term of the Rights Plan is ten years, subject to ratification by the shareholders at the Meeting and to reconfirmation by shareholders at the year 2000 annual meeting of the shareholders of the Company.

Shareholder Approval

For the Rights Plan to continue in effect following the Meeting, the Shareholder Rights Plan Resolution must be approved by a majority of the votes cast at the Meeting by shareholders voting in person or by proxy.

Issue of Rights

On the Effective Date, one right (a "Right") was issued and attached to each outstanding common share and Cumulative Equity Second Preferred Share Series B (an "Equity Preferred Share"). One Right will also attach to any subsequently issued common share and Equity Preferred Share. Also on the Effective Date, Debenture Rights were issued in respect of the outstanding 10.426% Convertible Subordinated Debentures ("Convertible Debentures") of the Company.

Rights Exercise Privilege

The Rights will separate from the shares to which they are attached and will become exercisable at the time (the "Separation Time") that is eight trading days after the earlier of a person having acquired, or the commencement, announcement or other date determined by the Board of Directors in respect of a take-over bid to acquire, 20% or more of the common shares, other than by an acquisition pursuant to a take-over bid permitted by the Rights Plan (a "Permitted Bid"). Debenture Rights will entitle a holder of Convertible Debentures to receive one Right for each whole common share issued upon conversion of the Convertible Debentures. After the Separation Time, Debenture Rights will entitle a holder of Convertible Debentures that have not been converted into common shares to receive automatically at the Separation Time one Right for each whole common share into which such holder's Convertible Debentures are then convertible.

The acquisition by a person (an "Acquiring Person"), including others acting in concert, of 20% or more of the common shares, other than by way of a Permitted Bid, is referred to as a "Flip-in Event". Any Rights held by an Acquiring Person on or after the earlier of the Separation Time or the first date of public announcement by the Company or an Acquiring Person that an Acquiring Person has become such, will become void upon the occurrence of a Flip-in Event. Eight trading days after the occurrence of the Flip-in Event, the Rights (other than those held by the Acquiring Person) will permit the holder to purchase, for example, common shares with a total market value of $120, on payment of $60 (i.e., at a 50% discount).

The issue of the Rights and Debenture Rights is not initially dilutive. Upon a Flip-in Event occurring and the Rights separating from the attached shares, reported earnings per Common Share on a fully diluted or non-diluted basis may be affected. Holders of Rights who do not exercise their Rights upon the occurrence of a Flip-in Event may suffer substantial dilution.

Certificates and Transferability

Prior to the Separation Time, the Rights will be evidenced by a legend imprinted on certificates for common shares and Equity Preferred Shares issued from and after the Effective Date. Rights are also attached to such shares outstanding on the Effective Date, although share certificates issued prior to that date will not bear such a legend. Prior to the Separation Time, Rights will not be transferable separately from the attached shares. From and after the Separation Time, the Rights will be evidenced by Rights certificates which will be transferable and traded separately from the shares.

Permitted Bid Requirements

The requirements of a Permitted Bid include the following:

(i) The take-over bid must be made by way of a take-over bid circular.

(ii) The take-over bid must be made for all common shares and to all holders thereof.

(iii) The take-over bid must not permit common shares tendered pursuant to the take-over bid to be taken up prior to the expiry of a period of not less than 60 days and then only if at such time more than 50% of the common shares held by shareholders other than the bidder, its affiliates and persons acting jointly or in concert with the bidder (the "Independent Shareholders") have been tendered pursuant to the take-over bid and not withdrawn.

(iv) If more than 50% of the common shares held by Independent Shareholders are tendered to the take-over bid within the 60 day period, the bidder must make a public announcement of that fact and the take-over bid must remain open for deposits of common shares for an additional 10 business days from the date of such public announcement.

The Rights Plan allows a competing Permitted Bid (a "Competing Permitted Bid") to be made while a Permitted Bid is in existence. A Competing Permitted Bid must satisfy all the requirements of a Permitted Bid except that, provided it is outstanding for a minimum period of 21 days, it may expire on the same date as the Permitted Bid.

Exchange Option

The Board of Directors, if it determines that the intended benefits of the Rights Plan to holders of Rights and Debenture Rights will be eliminated or materially diminished, may at any time after the occurrence of a Flip-in Event authorize the Company to exchange cash, securities or other assets ("Exchanged Assets") of a specified value for outstanding Rights, with or without requiring Rights holders to pay the Rights exercise price. If the terms of such an exchange require a holder of a Right to pay the exercise price, the holder would be entitled to receive, in exchange for each Right, Exchanged Assets of a value equal to twice the Rights exercise price. If the terms of the exchange do not require a holder of a Right to pay the exercise price, the holder would be entitled to receive, in exchange for each Right, Exchanged Assets of a value equal to the Rights exercise price.

Waiver and Redemption

The Board of Directors may, prior to a Flip-in Event, waive the dilutive effects of the Rights Plan in respect of a particular Flip-in Event, in which event such waiver would be deemed also to be a waiver in respect of any other Flip-in Event. The Board of Directors may also waive the Rights Plan in respect of a particular Flip-in Event that has occurred through inadvertence, provided that the Acquiring Person that inadvertently triggered such Flip-in Event reduces its beneficial holdings to less than 20% of the outstanding voting shares of the Company within 14 days or such other period as may be specified by the Board of Directors. At any time prior to the occurrence of a Flip-in Event, the Board of Directors may at its option redeem all, but not less than all, of the outstanding Rights and Debenture Rights at a price of $0.001 each.

Exemptions for Investment Advisors

Investment advisors (for client accounts) and trust companies (acting in their capacities as trustees and administrators) acquiring more than 20% of the common shares are exempted from triggering a Flip-in Event, provided that they are not making, or are not part of a group making, a take-over bid.

Supplements and Amendments

The Company is authorized to make amendments to the Rights Plan to correct any clerical or typographical error or, subject to subsequent ratification by shareholders or Rights holders, to maintain

the validity of the Rights Plan as a result of changes in law or regulation. Prior to the Meeting, the Company is authorized to amend or supplement the Rights Plan as the Board of Directors may in good faith deem necessary or desirable. No such amendments have been made to date. The Company will issue a press release relating to any significant amendment made to the Plan prior to the Meeting and will advise the shareholders of any such amendment at the Meeting. Other amendments or supplements to the Rights Plan may be made with the prior approval of shareholders or Rights holders.

Canadian and United States Federal Income Tax Consequences of the Rights Plan

Under the *Income Tax Act* (Canada) (the "Tax Act"), while the matter is not free from doubt, the issue of the Rights and Debenture Rights under the Rights Plan may be a taxable benefit which must be included in the income of a recipient. However, no amount must be included in income if the Rights and Debenture Rights do not have a monetary value at the date of issue. The Company considers that the Rights and Debenture Rights, when issued, will have negligible monetary value, there being only a remote possibility that the Rights and Debenture Rights will ever be exercised. The holder of Rights or Debenture Rights may have income or be subject to withholding tax under the Tax Act if the Rights or Debenture Rights become exercisable, or are exercised or are otherwise disposed of.

In the United States, the conclusion reached in Revenue Ruling 90-11 of the United States Internal Revenue Service, to the effect that the adoption of a rights plan by a corporation did not result in a recognition of taxable income by the corporation's shareholders, applies to the Company's adoption of the Rights Plan. It is uncertain whether a holder of a Right or a Debenture Right would recognize taxable income or gain in the event that Rights or Debenture Rights became exercisable or transferable, but it is likely that taxable income or gain would be recognized in the event that a holder exercises or otherwise disposes of Rights or Debenture Rights. In each case, the United States income tax consequences would depend upon the circumstances.

This statement is of a general nature only and is not intended to constitute nor should it be construed as legal or tax advice to any particular holder of common shares, Equity Preferred Shares or Convertible Debentures. Such holders are advised to consult their own tax advisors regarding the consequences of acquiring, holding, exercising or otherwise disposing of their Rights or Debenture Rights, taking into account their own particular circumstances and applicable federal, provincial, territorial, state or foreign legislation.

Eligibility for Investment in Canada

Provided that the Company remains a "public corporation" for purposes of the Tax Act at all material times, the Rights and Debenture Rights will each be qualified investments under that Act for Registered Retirement Savings Plans, Registered Retirement Income Funds and Deferred Profit Sharing Plans. The issue of Rights and Debenture Rights will not affect the status under the Tax Act of the common shares, Equity Preferred Shares or Convertible Debentures for such purposes nor will it affect the eligibility of such securities as investments for investors governed by certain Canadian federal and provincial legislation governing insurance companies, trust companies, loan companies and pension plans.

Recommendation of the Board of Directors

The Board of Directors has determined that the Rights Plan is in the best interests of the Company and its shareholders. The Board of Directors unanimously recommends that shareholders vote in favour of the Shareholder Rights Plan Resolution. The Shareholder Rights Plan Resolution requires the affirmative vote of a majority of the votes cast by shareholders who vote in person or by proxy in respect of that resolution.

Unless specified in the form of proxy that the shares represented by the form of proxy shall be withheld from voting on, or voted against, the resolution respecting approval of the Rights Plan, the persons designated in the enclosed form of proxy intend to vote "For" the Shareholder Rights Plan Resolution.

5. APPROVAL OF KESIP (1995)

Shareholders will be asked at the Meeting to consider and, if deemed advisable, to approve the Company's Key Employee Stock Incentive Plan (1995).

On February 23, 1995, the Board of Directors of the Company adopted the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)") by amending and extending KESIP. The purpose of KESIP (1995) is to provide the Company with a share related mechanism to attract, retain and motivate skilled and experienced employees and to reward such of those employees as may be awarded options under KESIP (1995) for their significant contributions toward the long term goals of the Company and encourage such employees to acquire shares of the Company as long term investments.

KESIP (1995) will be administered by the Human Resources Committee ("the Committee") of the Board of Directors. Persons eligible to participate in KESIP (1995) will be employees of the Company and its subsidiaries designated by the Committee.

The aggregate number of shares that may be issued pursuant to the exercise of options awarded under KESIP (1995) after January 1, 1995 is limited to 10,000,000 shares (subject to adjustment as a result of certain changes in the capital of TransCanada). Options may be awarded under KESIP (1995) until December 31, 2004. Shares issued upon the exercise of options will be from the authorized and unissued share capital of the Company.

The Committee may from time to time, in its sole discretion, award options to employees eligible to participate in KESIP (1995) and determine the number of shares subject to each such option (subject to certain regulatory limitations).

Twenty percent (20%) of the shares subject to an option will be purchasable on and after each of the first five anniversary dates following the award date of the option. Options will expire on the date fixed by the Committee at the time of the award of the option but not later than the tenth anniversary of the award date of the option. However, in the event of the death or retirement of an option holder all options held will be fully exercisable, and, in the event of the termination of employment of an option holder, other than by reason of death or retirement, the expiry date of all options held will be accelerated. The Committee may with the agreement of an option holder (and subject to obtaining any necessary regulatory approval), accelerate or extend any exercise date or expiry date (up to the tenth anniversary of the award date) of any option.

The exercise price of an option will be determined by the Committee at the time of the award of the option but shall not, in any event, be less than the weighted average trading price of the shares of the Company for the five consecutive trading days on The Toronto Stock Exchange ending on the trading day immediately preceding the award date of the option.

Options may only be exercised by the option holder or, in limited circumstances, a personal representative of the option holder and options may not be assigned or transferred.

The Committee may make appropriate adjustments in the number of shares subject to an option if a flip-in event (as defined in the Rights Plan of the Company) occurs and the rights (as defined in the Rights Plan) issued thereunder are separated from the shares of the Company and are exercisable on a dilutive basis.

KESIP (1995) was adopted by the Board of Directors of the Company subject to approval by the shareholders of the Company. A resolution substantially in the form set out in Schedule "A" to this Circular, will be presented at the Meeting.

For KESIP (1995) to be approved by the shareholders, the resolution must be passed by a majority of the votes cast on the resolution at the Meeting.

The detailed terms of KESIP (1995) are annexed hereto as Schedule "C".

OTHER INFORMATION

Directors' and Officers' Liability Insurance

The Company maintains Directors' and Officers' Liability Insurance with policy limits of U.S. $100 million in the aggregate, subject to a deductible in respect of corporate reimbursement of U.S. $250,000 for each loss. Generally, under this insurance the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Major exclusions from coverage include claims arising from illegal acts, those acts which result in personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions) and claims brought by a director or officer against the Company or by the Company against a director or officer except for shareholder derivative actions. For the year ended December 31, 1994, the total annual premium in respect of such insurance was Cdn $364,863 which was paid entirely by the Company. Of this amount, $112,266 was paid in respect of directors as a group and $252,597 was paid in respect of officers as a group.

SHAREHOLDER PROPOSALS

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 1996 annual meeting of holders of common shares of the Company (expected to be held in April 1996) must be received by the Corporate Secretary of the Company on or before the close of business on January 28, 1996.

DIRECTORS' APPROVAL

The contents of this Circular and the sending of it to each shareholder entitled to receive notice of the Meeting, to each director, to the auditors of the Company and to the appropriate governmental agencies, have been approved by the Board of Directors of the Company.

Alison T. Love

Alison T. Love
Corporate Secretary and
Associate General Counsel

Dated at Calgary, Alberta, March 10, 1995.

SCHEDULE "A"

1. **Shareholder Rights Plan Resolution**

   BE IT RESOLVED that:

   1. The Shareholder Rights Plan Agreement dated December 2, 1994 between TransCanada PipeLines Limited and Montreal Trust Company of Canada, which is attached as Schedule "B" to the Notice of Annual and Special Meeting and Management Proxy Circular, as the same may be amended prior to April 27, 1995, be and it is hereby ratified and confirmed.

   2. Any two officers or directors of TransCanada PipeLines Limited be and are hereby authorized, for and on behalf of TransCanada PipeLines Limited, to execute and deliver such other documents and instruments and to take such other actions as such directors or officers may determine to be necessary or advisable to implement this resolution and the matters authorized hereby, such determination to be conclusively evidenced by the execution and delivery of any such documents or instruments and the taking of any such actions.

2. **Key Employee Stock Incentive Plan (1995) Resolution**

   BE IT RESOLVED that:

   1. The Key Employee Stock Incentive Plan (1995) which is attached as Schedule "C" to the Notice of Annual and Special Meeting and Management Proxy Circular, be and it is hereby approved.

   2. Any two officers or directors of TransCanada PipeLines Limited be and are hereby authorized, for and on behalf of TransCanada PipeLines Limited, to execute and deliver such other documents and instruments and to take such other actions as such directors or officers may determine to be necessary or advisable to implement this resolution and the matters authorized hereby, such determination to be conclusively evidenced by the execution and delivery of any such documents or instruments and the taking of any such actions.

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Form of

SHAREHOLDER RIGHTS PLAN AGREEMENT

DATED AS OF DECEMBER 2, 1994

between

TRANSCANADA PIPELINES LIMITED

and

MONTREAL TRUST COMPANY OF CANADA
AS RIGHTS AGENT

SHAREHOLDER RIGHTS PLAN AGREEMENT

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SHAREHOLDER RIGHTS PLAN AGREEMENT

MEMORANDUM OF AGREEMENT dated as of December 2, 1994 between TransCanada PipeLines Limited (the "Corporation"), a corporation incorporated under the *Canada Business Corporations Act* and Montreal Trust Company of Canada, a trust company incorporated under the laws of Canada (the "Rights Agent");

WHEREAS the board of directors of the Corporation has determined that it is in the best interests of the Corporation to adopt a shareholder rights plan to insure, to the extent possible, that all shareholders of the Corporation are treated fairly in connection with any take-over bid for the Corporation;

AND WHEREAS in order to implement the adoption of a shareholder rights plan as established by this Agreement, the board of directors of the Corporation has:

(a) authorized the issuance, effective at 12:01 a.m. (Calgary time) on the Effective Date (as hereinafter defined), of one Right (as hereinafter defined) in respect of each Common Share (as hereinafter defined) and each Equity Preferred Share (as hereinafter defined) outstanding at 12:01 a.m. (Calgary time) on the Effective Date (the "Record Time");

(b) authorized the issuance, effective at 12:01 a.m. (Calgary time) on the Effective Date, of one Debenture Right (as hereinafter defined) for each $1,000 principal amount of Convertible Debentures (as hereinafter defined);

(c) authorized the issuance of one Right in respect of each Common Share of the Corporation issued after the Record Time and prior to the earlier of the Separation Time (as hereinafter defined) and the Expiration Time (as hereinafter defined); and

(d) authorized the issuance of Rights to holders of Debenture Rights upon the terms and subject to the conditions set forth herein;

AND WHEREAS each Right entitles the holder thereof, after the Separation Time, to purchase securities of the Corporation pursuant to the terms and subject to the conditions set forth herein;

AND WHEREAS the Corporation desires to appoint the Rights Agent to act on behalf of the Corporation and the holders of Rights and Debenture Rights, and the Rights Agent is willing to so act, in connection with the issuance, transfer, exchange and replacement of Rights Certificates (as hereinafter defined), the exercise of Rights and other matters referred to herein;

AND WHEREAS the Board of Directors of the Corporation proposes that this Agreement be in place for a period of ten years, subject to the Agreement being reconfirmed by shareholders of the Corporation after a period of five years;

NOW THEREFORE, in consideration of the premises and the respective covenants and agreements set forth herein, and subject to such covenants and agreements, the parties hereby agree as follows:

ARTICLE 1 — INTERPRETATION

1.1 Certain Definitions

For purposes of this Agreement, the following terms have the meanings indicated:

(a) "**Acquiring Person**" shall mean any Person who is the Beneficial Owner of 20% or more of the outstanding Voting Shares of any class; provided, however, that the term "Acquiring Person" shall not include:

(i) the Corporation or any Subsidiary of the Corporation;

(ii) any Person who becomes the Beneficial Owner of 20% or more of the outstanding Voting Shares of any class as a result of one or any combination of (A) a Voting Share Reduction, (B) Permitted Bid Acquisitions, (C) an Exempt Acquisition or (D) Pro Rata Acquisitions; provided, however, that if a Person becomes the Beneficial Owner of 20% or more of the outstanding Voting Shares of any class by reason of one or any combination of the operation of Paragraphs (A), (B), (C) or (D) above and such Person's Beneficial Ownership of Voting Shares of that particular class thereafter increases by more than 1.0% of the number of Voting Shares of that class outstanding (other than pursuant to one or any combination of a Voting Share Reduction, a Permitted Bid Acquisition, an Exempt Acquisition or a Pro Rata Acquisition), then as of the date such Person becomes the Beneficial Owner of such additional Voting Shares of that particular class, such Person shall become an "Acquiring Person";

(iii) for a period of ten days after the Disqualification Date (as defined below), any Person who becomes the Beneficial Owner of 20% or more of the outstanding Voting Shares as a result of such Person becoming disqualified from relying on Clause 1.1(f)(D) solely because such Person or the Beneficial Owner of such Voting Shares has participated in, proposes or intends to make or is participating in a Take-over Bid or any plan or proposal relating thereto or resulting therefrom, either alone or by acting jointly or in concert with any other Person. For the purposes of this definition, "Disqualification Date" means the first date of public announcement of facts indicating that any Person has participated in, has made, proposes or intends to make or is participating in a Take-over Bid or any plans or proposals relating thereto or resulting therefrom including, without limitation, a report filed pursuant to Section 141 of the *Securities Act* (Alberta) or Section 13(d) of the *1934 Exchange Act;*

(iv) an underwriter or member of a banking or selling group that becomes the Beneficial Owner of 20% or more of the Voting Shares in connection with a *bona fide* distribution to the public of securities of the Corporation; or

(v) a Person (a "Grandfathered Person") who is the Beneficial Owner of 20% or more of the outstanding Voting Shares of the Corporation determined as at the Record Time, provided, however, that this exception shall not be, and shall cease to be, applicable to a Grandfathered Person in the event that such Grandfathered Person shall, after the Record Time, become the Beneficial Owner of any additional Voting Shares of the Corporation that increases its Beneficial Ownership of Voting Shares by more than 1% of the number of Voting Shares outstanding as at the Record Time, other than through a Permitted Bid Acquisition or a Pro Rata Acquisition;

(b) "**Affiliate**": when used to indicate a relationship with a Person means a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such specified Person;

(c) "**Agreement**" shall mean this shareholder rights plan agreement dated as of December 2, 1994 between the Corporation and the Rights Agent, as amended or supplemented from time to time; "hereof", "herein", "hereto" and similar expressions mean and refer to this Agreement as a whole and not to any particular part of this Agreement;

(d) "**annual cash dividend**" shall mean cash dividends paid in any fiscal year of the Corporation to the extent that such cash dividends do not exceed, in the aggregate, the greatest of:

   (i) 200 per cent of the aggregate amount of cash dividends declared payable by the Corporation on its Common Shares in its immediately preceding fiscal year;

   (ii) 300 per cent of the arithmetic mean of the aggregate amounts of the annual cash dividends declared payable by the Corporation on its Common Shares in its three immediately preceding fiscal years; and

   (iii) 100 per cent of the aggregate consolidated net income of the Corporation, before extraordinary items, for its immediately preceding fiscal year;

(e) "**Associate**" means, when used to indicate a relationship with a specified Person:

   (i) a corporation of which that Person owns at law or in equity shares or securities currently convertible into shares carrying more than 10 per cent of the voting rights exercisable with respect to the election of directors under all circumstances or by reason of the occurrence of an event that has occurred and is continuing, or a currently exercisable option or right to purchase such shares or such convertible securities and with whom that Person is acting jointly or in concert;

   (ii) a partner of that Person acting on behalf of the partnership of which they are partners;

   (iii) a trust or estate in which that Person has a beneficial interest and with whom that Person is acting jointly or in concert or in which that Person has a beneficial interest of 50% or more or in respect of which that Person serves as a trustee or in a similar capacity provided, however, that a Person shall not be an Associate of a trust by reason only of the fact that such Person serves as trustee or in a similar capacity in relation to such trust if such Person is duly licensed to carry on the business of a trust company under the laws of Canada or any province thereof or if the ordinary business of such Person includes the management of investment funds for unaffiliated investors and such Person acts as trustee or in a similar capacity in relation to such trust in the ordinary course of such business; and

   (iv) a spouse of that Person, any Person of the same or opposite sex with whom that Person is living in a conjugal relationship outside marriage, a child of that Person or a relative of that Person if that relative has the same residence as that Person;

(f) A Person shall be deemed the "**Beneficial Owner**" of, and to have "**Beneficial Ownership**" of, and to "**Beneficially Own**",

   (i) any securities as to which such Person or any of such Person's Affiliates is the direct or indirect owner at law or in equity and for the purposes of this Clause 1.1(f)(i) a Person shall be deemed to be an owner at law or in equity of all securities:

      (A) owned by a partnership of which the Person is a partner;

      (B) owned by a trust in which the Person has a beneficial interest and which is acting jointly or in concert with that Person or in which the Person has a beneficial interest of 50% or more;

      (C) owned jointly or in common with others; and

      (D) of which the Person may be deemed to be the beneficial owner (whether or not of record) pursuant to the provisions of the *Canada Business Corporations Act* or the *Securities Act* (Alberta), including subsections 131(4), (5) and (6) thereof, or pursuant to Rule 13d-3 or 13d-5 under the *1934 Exchange Act* (or pursuant to any comparable or successor laws, regulations or rules or, if such laws, regulations or rules shall be rescinded and there shall

be no comparable or successor laws, regulations or rules, pursuant to the provisions of the *Canada Business Corporations Act* or the *Securities Act* (Alberta) or pursuant to Rule 13d-3 or 13d-5 as in effect on the date of this Agreement);

(ii) any securities as to which such Person or any of such Person's Affiliates or Associates has, directly or indirectly:

(A) the right to acquire (whether such right is exercisable immediately or after the lapse or passage of time and whether or not on condition or the happening of any contingency or otherwise) pursuant to any agreement, arrangement, pledge or understanding, whether or not in writing (other than (x) customary agreements with and between underwriters and/or banking group members and/or selling group members with respect to a *bona fide* public offering of securities, (y) pledges of securities in the ordinary course of business that meet all the conditions specified in Rule 13d-3(d)(3) under the *1934 Exchange Act* (except for the condition in Rule 13d-3(d)(3)(ii)) and (z) pledge agreements with a registered securities dealer relating to the extension of credit for purchases of securities on margin in the ordinary course of the dealer's business), or upon the exercise of any conversion right, exchange right, share purchase right (other than the Rights), warrant or option, or otherwise; or

(B) the right to vote such securities (whether such right is exercisable immediately or after the lapse or passage of time and whether or not on condition or the happening of any contingency or otherwise) pursuant to any agreement, arrangement, pledge (other than (x) pledges of securities in the ordinary course of business that meet all the conditions specified in Rule 13d-3(d)(3) under the *1934 Exchange Act* (except for the condition in Rule 13d-3(d)(3)(ii)) and (y) pledge agreements with a registered securities dealer relating to the extension of credit for purchases of securities on margin in the ordinary course of the dealer's business) or understanding (whether or not in writing) or otherwise;

(iii) any securities which are Beneficially Owned within the meaning of Clauses 1.1(f)(i) or (ii) by any other Person with which such Person or any of such Person's Affiliates has any agreement, arrangement or understanding, whether or not in writing (other than (x) customary agreements with and between underwriters and/or banking group members and/or selling group members with respect to a *bona fide* public offering of securities, (y) pledges of securities in the ordinary course of business that meet all the conditions specified in Rule 13d-3(d)(3) under the *1934 Exchange Act* (except for the condition in Rule 13d-3(d)(3)(ii)) and (z) pledge agreements with a registered securities dealer relating to the extension of credit for purchases of securities on margin in the ordinary course of the dealer's business) with respect to or for the purpose of acquiring, holding, voting or disposing of any Voting Shares of any class; and

(iv) any securities which are directly or indirectly owned at law or in equity by an Associate of such Person;

provided, however, that a Person shall not be deemed the "**Beneficial Owner**" of, or to have "**Beneficial Ownership**" of, or to "**Beneficially Own**", any security:

(A) where such security has been deposited or tendered pursuant to any Take-over Bid made by such Person, made by any of such Person's Affiliates or Associates or made by any other Person referred to in Clause 1.1(f)(iii), until such deposited or tendered security has been taken up or paid for, whichever shall first occur;

(B) where such Person, any of such Person's Affiliates or Associates or any other Person referred to in Clause 1.1(f)(iii), has or shares the power to vote or direct the voting of such security pursuant to a revocable proxy given in response to a public proxy solicitation or where such Person has an agreement, arrangement or understanding with respect to a shareholder proposal or proposals or a matter or matters to come before a meeting of shareholders, including the election of directors;

(C) where such Person, any of such Person's Affiliates or Associates or any other Person referred to in Clause 1.1(f)(iii), has or shares the power to vote or direct the voting of such security in connection with or in order to participate in a public proxy solicitation or where such Person has an agreement, arrangement or understanding with respect to a shareholder proposal or proposals or a matter or matters to come before a meeting of shareholders, including the election of directors;

(D) where such Person, any of such Person's Affiliates or Associates or any other Person referred to in Clause 1.1(f)(iii), holds or exercises voting or dispositive power over such security provided that:

(1) the ordinary business of any such Person (the "Investment Manager") includes the management of investment funds for others (which others, for greater certainty, may include or be limited to one or more employee benefit plans or pension plans) and such voting or dispositive power over such security is held by the Investment Manager in the ordinary course of such business in the performance of such Investment Manager's duties for the account of any other Person (a "Client");

(2) such Person (the "Trust Company") is licensed to carry on the business of a trust company under the laws of Canada or any province thereof and, as such, acts as trustee or administrator or in a similar capacity in relation to the estates of deceased or incompetent Persons (each an "Estate Account") or in relation to other accounts (each an "Other Account") and holds such voting or dispositive power over such security in the ordinary course of such duties for the estate of any such deceased or incompetent Person or for such other accounts;

(3) such Person is established by statute for purposes that include, and a substantial portion of the ordinary business or activity of such Person (the "Statutory Body") is, the management of investment funds for employee benefit plans, pension plans, insurance plans or various public bodies; or

(4) such Person (the "Administrator") is the administrator or trustee of one or more pension funds or plans registered under the laws of Canada or any Province thereof or the laws of the United States of America or any State thereof;

provided, in any of the above cases, that the Investment Manager, the Trust Company, the Statutory Body or the Administrator, as the case may be, is not then making or proposing to make a Take-over Bid, other than an Offer to Acquire Voting Shares or other securities by means of a distribution by the Corporation or by means of ordinary market transactions (including prearranged trades) executed through the facilities of a stock exchange or organized over-the-counter market, alone or by acting jointly or in concert with any other Person; or

(E) where such Person is a Client of the same Investment Manager as another Person on whose account the Investment Manager holds or exercises voting or dispositive power over such security, or by reason of such Person being an Estate Account or an Other Account of the same Trust Company as another Person on whose account the Trust Company holds or exercises voting or dispositive power over such security;

(g) "**Board of Directors**" shall mean the board of directors of the Corporation or any duly constituted and empowered committee thereof;

(h) "**Business Day**" shall mean any day other than a Saturday, Sunday or a day on which banking institutions in Calgary are authorized or obligated by law to close;

(i) "***Canada Business Corporations Act***" means the *Canada Business Corporations Act*, R.S.C. 1985, C. 44, as amended, and the regulations made thereunder, and any comparable or successor laws or regulations thereto;

(j) "**Canadian Dollar Equivalent**" of any amount which is expressed in United States Dollars means, on any date, the Canadian dollar equivalent of such amount determined by multiplying such amount by the U.S. - Canadian Exchange Rate in effect on such date;

(k) "**Canadian - U.S. Exchange Rate**" means, on any date, the inverse of the U.S. - Canadian Exchange Rate in effect on such date;

(l) "**close of business**" on any given date shall mean the time on such date (or, if such date is not a Business Day, the time on the next succeeding Business Day) at which the principal transfer office in Calgary of the transfer agent for the Common Shares of the Corporation (or, after the Separation Time, the principal transfer office in Calgary of the Rights Agent) is closed to the public;

(m) "**Common Shares**" shall mean the Common Shares in the capital of the Corporation;

(n) "**Competing Permitted Bid**" means a Take-over Bid made while another Permitted Bid is in existence and that satisfies all of the provisions of a Permitted Bid except that the condition set forth in Clause 1.1(al)(ii) may provide that the Voting Shares of the particular class that are the subject of the Take-over Bid may be taken up or paid for on a date which is not earlier than the later of 21 days after the date of the Take-over Bid or the earliest date on which Voting Shares of that particular class may be taken up or paid for under any other Permitted Bid that is then in existence for the Voting Shares of that particular class;

(o) "**controlled**": a corporation shall be deemed to be "controlled" by another Person or two or more Persons if:

(i) securities entitled to vote in the election of directors carrying more than 50 per cent of the votes for the election of directors are held, directly or indirectly, by or for the benefit of the other Person or Persons; and

(ii) the votes carried by such securities are entitled, if exercised, to elect a majority of the board of directors of such corporation;

(p) "**Co-Rights Agents**" shall have the meaning ascribed thereto in Subsection 4.1(a);

(q) "**Convertible Debentures**" means the 10.426% Convertible Subordinated Debentures of the Corporation;

(r) "**Debenture Right**" means a right, issued in respect of Convertible Debentures, to receive Rights upon the terms and subject to the conditions set forth in this Agreement;

(s) "**Disposition Date**" shall have the meaning ascribed thereto in Subsection 6.1(h);

(t) "**Dividend Reinvestment Acquisition**" shall mean an acquisition of Voting Shares of any class pursuant to a Dividend Reinvestment Plan;

(u) "**Dividend Reinvestment Plan**" means a regular dividend reinvestment or other plan of the Corporation made available by the Corporation to holders of its securities where such plan permits the holder to direct that some or all of:

(i) dividends paid in respect of shares of any class of the Corporation;

(ii) proceeds of redemption of shares of the Corporation;

(iii) interest paid on evidences of indebtedness of the Corporation; or

(iv) optional cash payments;

be applied to the purchase from the Corporation of Common Shares;

(v) "**Election to Exercise**" shall have the meaning ascribed thereto in Clause 2.2(d)(ii);

(w) "**Effective Date**" means December 2, 1994;

(x) "**Equity Preferred Shares**" means Cumulative Equity Second Preferred Shares Series B in the capital of the Corporation;

(y) "**Exempt Acquisition**" means a share acquisition in respect of which the Board of Directors has waived the application of Section 3.1 pursuant to the provisions of Subsection 6.1(a) or (h);

(z) "**Exercise Price**" shall mean, as of any date, the price at which a holder may purchase the securities issuable upon exercise of one whole Right which, until adjustment thereof in accordance with the terms hereof, shall be $60;

(aa) "**Expansion Factor**" shall have the meaning ascribed thereto in Clause 2.3(a)(x);

(ab) "**Expiration Time**" shall mean the close of business on that date which is the earliest of the date of termination of this Agreement pursuant to Section 6.15 or, if this Agreement is confirmed pursuant to Section 6.15, the date of termination of this Agreement pursuant to Section 6.16 or, if this Agreement is reconfirmed pursuant to Section 6.16, the close of business on the tenth anniversary of the Effective Date;

(ac) "**Flip-in Event**" shall mean a transaction in or pursuant to which any Person becomes an Acquiring Person;

(ad) "**holder**" shall have the meaning ascribed thereto in Section 2.8;

(ae) "**Independent Shareholders**" shall mean holders of Voting Shares, other than:

(i) any Acquiring Person;

(ii) any Offeror;

(iii) any Affiliate or Associate of any Acquiring Person or Offeror;

(iv) any Person acting jointly or in concert with any Acquiring Person or Offeror, or with any Affiliate or Associate of any Acquiring Person or Offeror; and

(v) any employee benefit plan, deferred profit sharing plan, stock participation plan and any other similar plan or trust for the benefit of employees of the Corporation unless the beneficiaries of the plan or trust direct the manner in which the Voting Shares are to be voted or direct whether the Voting Shares are to be tendered to a Take-over Bid;

(af) "**Market Price**" per share of any securities on any date of determination shall mean the average of the daily closing prices per share of such securities (determined as described below) on each of the 20 consecutive Trading Days through and including the Trading Day immediately preceding such date; provided, however, that if an event of a type analogous to any of the events described in Section 2.3 hereof shall have caused the closing prices used to determine the Market Price on any Trading Days not to be fully comparable with the closing price on such date of determination or, if the date of determination is not a Trading Day, on the immediately preceding Trading Day, each such closing price so used shall be appropriately adjusted in a manner analogous to the applicable adjustment provided for in Section 2.3 hereof in order to make it fully comparable with the closing price on such date of determination or, if the date of determination is not a Trading Day, on the immediately preceding Trading Day. The closing price per share of any securities on any date shall be:

(i) the closing board lot sale price or, in case no such sale takes place on such date, the average of the closing bid and asked prices for each of such securities as reported by the principal Canadian stock exchange (as determined by the Board of Directors) on which such securities are listed or admitted to trading;

(ii) if for any reason none of such prices is available on such day or the securities are not listed or posted for trading on a Canadian stock exchange, the last sale price or, in case no such sale takes place on such date, the average of the closing bid and asked prices for each of such securities as reported by the principal national United States securities exchange (as determined by the Board of Directors) on which such securities are listed or admitted to trading;

(iii) if for any reason none of such prices is available on such day or the securities are not listed or admitted to trading on a Canadian stock exchange or a national United States securities exchange, the last sale price or, in case no sale takes place on such date, the average of the high bid and low asked prices for each of such securities in the over-the-counter market, as quoted by any reporting system then in use (as determined by the Board of Directors); or

(iv) if for any reason none of such prices is available on such day or the securities are not listed or admitted to trading on a Canadian stock exchange or a national United States securities exchange or quoted by any such reporting system, the average of the closing bid and asked prices as furnished by a professional market maker making a market in the securities selected by the Board of Directors;

provided, however, that if for any reason none of such prices is available on such day, the closing price per share of such securities on such date means the fair value per share of such securities on such date as determined by the Board of Directors, after consultation with a nationally recognized investment dealer or investment banker with respect to the fair value per share of such securities. The Market Price shall be expressed in Canadian dollars and, if initially determined in respect of any day forming part of the 20 consecutive Trading Day period in question in United States dollars, such amount shall be translated into Canadian dollars on such date at the Canadian Dollar Equivalent thereof.

Notwithstanding the foregoing, where the Board of Directors is satisfied that the Market Price of securities as determined herein was affected by an anticipated or actual Take-over Bid or by improper manipulation, the Board of Directors may, acting in good faith, determine the Market Price of securities, such determination to be based on a finding as to the price at which a holder of securities of that class could reasonably have expected to dispose of his securities immediately prior to the relevant date excluding any change in price reasonably attributable to the anticipated or actual Take-over Bid or to the improper manipulation;

(ag) "***1934 Exchange Act***" means the *Securities Exchange Act of 1934* of the United States, as amended, and the rules and regulations thereunder as now in effect or as the same may from time to time be amended, re-enacted or replaced;

(ah) "**Nominee**" shall have the meaning ascribed thereto in Subsection 2.2(c);

(ai) "**Offer to Acquire**" shall include:

(i) an offer to purchase or a solicitation of an offer to sell Voting Shares of any class or classes; and

(ii) an acceptance of an offer to sell Voting Shares of any class or classes, whether or not such offer to sell has been solicited;

or any combination thereof, and the Person accepting an offer to sell shall be deemed to be making an Offer to Acquire to the Person that made the offer to sell;

(aj) "**Offeror**" shall mean a Person who has announced an intention to make or who has made a Take-over Bid;

(ak) "**Offeror's Securities**" means Voting Shares Beneficially Owned by an Offeror on the date of the Offer to Acquire;

(al) "**Permitted Bid**" means a Take-over Bid made by an Offeror by way of take-over bid circular which also complies with the following additional provisions:

(i) the Take-over Bid is made for all outstanding Voting Shares of a particular class and to all holders of Voting Shares of that particular class as registered on the books of the Corporation, other than the Offeror;

(ii) the Take-over Bid contains, and the take-up and payment for securities tendered or deposited is subject to, an irrevocable and unqualified provision that no Voting Shares of the particular class that is subject to the Take-over Bid will be taken up or paid for pursuant to the Take-over Bid prior to the close of business on the date which is not less than 60 days following the date of the Take-over Bid and only if at such date more than 50% of the Voting Shares held by Independent Shareholders shall have been deposited or tendered pursuant to the Take-over Bid and not withdrawn;

(iii) the Take-over Bid contains an irrevocable and unqualified provision that Voting Shares may be deposited pursuant to such Take-over Bid at any time during the period of time described in Clause 1.1(al)(ii) and that any Voting Shares deposited pursuant to the Take-over Bid may be withdrawn until taken up and paid for; and

(iv) the Take-over Bid contains an irrevocable and unqualified provision that in the event that the deposit condition set forth in Clause 1.1(al)(ii) is satisfied the Offeror will make a public announcement of that fact and the Take-over Bid will remain open for deposits and tenders of Voting Shares for not less than ten Business Days from the date of such public announcement;

(am) "**Permitted Bid Acquisition**" shall mean an acquisition of Voting Shares of any class made pursuant to a Permitted Bid or a Competing Permitted Bid;

(an) "**Person**" shall include an individual, body corporate, partnership, syndicate or other form of unincorporated association, a government and its agencies or instrumentalities, any entity or group whether or not having legal personality and any of the foregoing acting in any derivative, representative or fiduciary capacity;

(ao) "**Pro Rata Acquisition**" means an acquisition by a Person of Voting Shares pursuant to:

(i) a Dividend Reinvestment Acquisition;

(ii) a stock dividend, stock split or other event in respect of securities of the Corporation of one or more particular classes or series pursuant to which such Person becomes the Beneficial Owner of Voting Shares on the same pro rata basis as all other holders of securities of the particular class, classes or series;

(iii) the exercise by the Person of only those rights to purchase Voting Shares distributed to that Person in the course of a distribution to all holders of securities of the Corporation of one or more particular classes or series pursuant to a *bona fide* rights offering or pursuant to a prospectus; or

(iv) a distribution to the public of Voting Shares, or securities convertible into or exchangeable for Voting Shares (and the conversion or exchange of such convertible or exchangeable securities), made pursuant to a prospectus or by way of a private placement, provided that the Person does not thereby acquire a greater percentage of such Voting Shares, or securities convertible into or exchangeable for Voting Shares, so offered than the Person's percentage of Voting Shares Beneficially Owned immediately prior to such acquisition;

(ap) "**Record Time**" has the meaning set forth in the first whereas clause;

(aq) "**Right**" means a right to purchase a Common Share of the Corporation upon the terms and subject to the conditions set forth in this Agreement;

(ar) "**Rights Certificate**" means the certificates representing the Rights after the Separation Time, which shall be substantially in the form attached hereto as Attachment 1;

(as) "**Rights Register**" shall have the meaning ascribed thereto in Subsection 2.6(a);

(at) "*Securities Act* **(Alberta)**" shall mean the *Securities Act*, S.A. 1991, c.S-6.1, as amended, and the regulations thereunder, and any comparable or successor laws or regulations thereto;

(au) "**Separation Time**" shall mean the close of business on the eighth Trading Day after the earlier of:

(i) the Stock Acquisition Date; and

(ii) the date of the commencement of or first public announcement of the intent of any Person (other than the Corporation or any Subsidiary of the Corporation) to commence a Take-over Bid (other than a Permitted Bid or a Competing Permitted Bid), or such earlier or later time as may be determined by the Board of Directors, provided that, if any Take-over Bid referred to in this Clause (ii) expires, is cancelled, terminated or otherwise withdrawn prior to the Separation Time, such Take-over Bid shall be deemed, for the purposes of this definition, never to have been made;

(av) "**Stock Acquisition Date**" shall mean the first date of public announcement (which, for purposes of this definition, shall include, without limitation, a report filed pursuant to section 141 of the *Securities Act* (Alberta) or Section 13(d) of the *1934 Exchange Act*) by the Corporation or an Acquiring Person that an Acquiring Person has become such;

(aw) "**Subsidiary**": a corporation shall be deemed to be a Subsidiary of another corporation if:

(i) it is controlled by:

(A) that other; or

(B) that other and one or more corporations each of which is controlled by that other; or

(C) two or more corporations each of which is controlled by that other; or

(ii) it is a Subsidiary of a corporation that is that other's Subsidiary;

(ax) "**Take-over Bid**" shall mean an Offer to Acquire Voting Shares of any class, or securities convertible into Voting Shares of any class if, assuming that the Voting Shares or convertible securities subject to the Offer to Acquire are acquired and are Beneficially Owned at the date of such Offer to Acquire by the Person making such Offer to Acquire, such Voting Shares (including Voting Shares that may be acquired upon conversion of securities convertible into Voting Shares) together with the Offeror's Securities, constitute in the aggregate 20% or more of the outstanding Voting Shares of that particular class at the date of the Offer to Acquire;

(ay) "**Trading Day**", when used with respect to any securities, shall mean a day on which the principal Canadian stock exchange on which such securities are listed or admitted to trading is open for the transaction of business or, if the securities are not listed or admitted to trading on any Canadian stock exchange, a Business Day;

(az) "**U.S. - Canadian Exchange Rate**" means, on any date:

(i) if on such date the Bank of Canada sets an average noon spot rate of exchange for the conversion of one United States dollar into Canadian dollars, such rate; and

(ii) in any other case, the rate for such date for the conversion of one United States dollar into Canadian dollars calculated in such manner as may be determined by the Board of Directors from time to time acting in good faith;

(ba) "**U.S. Dollar Equivalent**" of any amount which is expressed in Canadian dollars means, on any date, the United States dollar equivalent of such amount determined by multiplying such amount by the Canadian - U.S. Exchange Rate in effect on such date; and

(bb) "**Voting Share Reduction**" means an acquisition or redemption by the Corporation of Voting Shares of any class which, by reducing the number of Voting Shares of that particular class outstanding, increases the proportionate number of Voting Shares of that particular class Beneficially Owned by any person to 20% or more of the Voting Shares of that particular class then outstanding;

(bc) "**Voting Shares**" shall mean the Common Shares of the Corporation and any other shares in the capital of the Corporation entitled to vote generally in the election of all directors.

1.2 Currency

All sums of money which are referred to in this Agreement are expressed in lawful money of Canada, unless otherwise specified.

1.3 Headings

The division of this Agreement into Articles, Sections, Subsections, Clauses, Paragraphs, Subparagraphs or other portions hereof and the insertion of headings, subheadings and a table of contents are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

1.4 Calculation of Number and Percentage of Beneficial Ownership of Outstanding Voting Shares

For purposes of this Agreement, the percentage of Voting Shares of any class Beneficially Owned by any Person, shall be and be deemed to be the product (expressed as a percentage) determined by the formula:

$100 \times A/B$

where:

A = the number of votes for the election of all directors generally attaching to the Voting Shares of the particular class Beneficially Owned by such Person; and

B = the number of votes for the election of all directors generally attaching to all outstanding Voting Shares of the particular class.

Where any Person is deemed to Beneficially Own unissued Voting Shares of a particular class, such Voting Shares shall be deemed to be outstanding for the purpose of calculating the percentage of Voting Shares of the particular class Beneficially Owned by such Person.

1.5 Acting Jointly or in Concert

For purposes of this Agreement, whether Persons are acting jointly or in concert is a question of fact in each circumstance, however, a Person shall be deemed to be acting jointly or in concert with another Person if such Person would be deemed to be acting jointly or in concert with such other Person for purposes of Section 131.1 of the *Securities Act* (Alberta) (other than by virtue of the inclusion of the word "associate" in Section 131.1 of the *Securities Act* (Alberta)) as it exists on the date hereof. Notwithstanding the foregoing and for greater certainty, the phrase "acting jointly or in concert", wherever used in this Agreement, shall not include conduct:

(i) unrelated to the Corporation; or

(ii) pertaining to:

(A) voting or directing the vote of securities of the Corporation pursuant to a revocable proxy given in response to a public proxy solicitation;

(B) voting or directing the vote of securities of the Corporation in connection with or in order to participate in a public proxy solicitation made or to be made;

(C) having an agreement, arrangement or understanding with respect to a particular shareholder proposal or a particular matter to come before a meeting of shareholders, including the election of directors.

1.6 Generally Accepted Accounting Principles

Wherever in this Agreement reference is made to generally accepted accounting principles, such reference shall be deemed to be the recommendations at the relevant time of the Canadian Institute of Chartered Accountants, or any successor institute, applicable on a consolidated basis (unless otherwise specifically provided herein to be applicable on an unconsolidated basis) as at the date on which a calculation is made or required to be made in accordance with generally accepted accounting principles. Where the character or amount of any asset or liability or item of revenue or expense is required to be determined, or any consolidation or other accounting computation is required to be made for the purpose of this Agreement or any document, such determination or calculation shall, to the extent applicable and except as otherwise specified herein or as otherwise agreed in writing by the parties, be made in accordance with generally accepted accounting principles applied on a consistent basis.

ARTICLE 2 — THE RIGHTS

2.1 Legend on Common Share and Equity Preferred Share Certificates

Certificates representing Common Shares and Equity Preferred Shares which are issued after the Record Time but prior to the earlier of the Separation Time and the Expiration Time, shall also evidence one Right for each Common Share or Equity Preferred Share represented thereby and shall have impressed on, printed on, written on or otherwise affixed to them the following legend:

> Until the Separation Time (defined in the Shareholder Rights Agreement referred to below), this certificate also evidences rights of the holder described in a Shareholder Rights Plan Agreement dated as of December 2, 1994 (the "Shareholder Rights Agreement") between TransCanada PipeLines Limited (the "Corporation") and Montreal Trust Company of Canada, as supplemented and amended, the terms of which are incorporated herein by reference and a copy of which is on file at the principal executive offices of the Corporation. Under certain circumstances set out in the Shareholder Rights Agreement, the rights may expire, may become null and void or may be evidenced by separate certificates and no longer evidenced by this certificate. The Corporation will mail or arrange for the mailing of a copy of the Shareholder Rights Agreement to the holder of this certificate without charge as soon as practicable after the receipt of a written request therefor.

Certificates representing Common Shares and Equity Preferred Shares that are issued and outstanding at the Record Time shall also evidence one Right for each Common Share or Equity Preferred Share represented thereby, notwithstanding the absence of the foregoing legend, until the close of business on the earlier of the Separation Time and the Expiration Time.

2.2 Initial Exercise Price; Exercise of Rights; Detachment of Rights

(a) Subject to adjustment as herein set forth, each Right will entitle the holder thereof, from and after the Separation Time and prior to the Expiration Time, to purchase one Common Share for the Exercise Price (and the Exercise Price and number of Common Shares are subject to adjustment as set forth below). Notwithstanding any other provision of this Agreement, any Rights held by the Corporation or any of its Subsidiaries shall be void.

(b) Until the Separation Time,

(i) the Rights shall not be exercisable and no Right may be exercised; and

(ii) each Right will be evidenced by the certificate for the associated Common Share or Equity Preferred Share of the Corporation registered in the name of the holder thereof (which certificate shall also be deemed to represent a Rights Certificate) and will be transferable only together with, and will be transferred by a transfer of, such associated Common Share or Equity Preferred Share of the Corporation and, upon the conversion of Equity Preferred Shares into Common Shares, the Rights that were, immediately prior to such conversion, associated with the Equity Preferred Shares so converted shall become null and void and shall thereafter confer no right to exercise the same or any other right in respect thereof.

(c) From and after the Separation Time and prior to the Expiration Time:

(i) the Rights shall be exercisable; and

(ii) the registration and transfer of Rights shall be separate from and independent of Common Shares and Equity Preferred Shares of the Corporation.

Promptly following the Separation Time, the Corporation will prepare and the Rights Agent will mail to each holder of record of Common Shares as of the Separation Time (other than an Acquiring Person and, in respect of any Rights Beneficially Owned by such Acquiring Person which are not held of record by such Acquiring Person, the holder of record of such Rights (a "Nominee")), to each holder of record of Equity Preferred Shares as of the Separation Time (other than an Acquiring Person or the Nominee of an Acquiring Person) and to each holder of record of Convertible Debentures as of the Separation Time (other than an Acquiring Person or a Nominee of an Acquiring Person) at such holder's address as shown by the records of the Corporation (the Corporation hereby agreeing to furnish copies of such records to the Rights Agent for this purpose):

(x) a Rights Certificate appropriately completed, representing the number of Rights held by such holder at the Separation Time and having such marks of identification or designation and such legends, summaries or endorsements printed thereon as the Corporation may deem appropriate and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any law, rule or regulation or with any rule or regulation of any self-regulatory organization, stock exchange or quotation system on which the Rights may from time to time be listed or traded, or to conform to usage; and

(y) a disclosure statement describing the Rights,

provided that a Nominee shall be sent the materials provided for in (x) and (y) in respect of all Common Shares, Equity Preferred Shares and Convertible Debentures of the Corporation held of record by it which are not Beneficially Owned by an Acquiring Person.

(d) Rights may be exercised, in whole or in part, on any Business Day after the Separation Time and prior to the Expiration Time by submitting to the Rights Agent:

(i) the Rights Certificate evidencing such Rights;

(ii) an election to exercise such Rights (an "Election to Exercise") substantially in the form attached to the Rights Certificate appropriately completed and executed by the holder or his executors or administrators or other personal representatives or his or their legal attorney duly appointed by an instrument in writing in form and executed in a manner satisfactory to the Rights Agent; and

(iii) payment by certified cheque, banker's draft or money order payable to the order of the Corporation, of a sum equal to the Exercise Price multiplied by the number of Rights being exercised and a sum sufficient to cover any transfer tax or charge which may be payable in respect of any transfer involved in the transfer or delivery of Rights Certificates or the issuance or delivery of certificates for Common Shares in a name other than that of the holder of the Rights being exercised.

(e) Upon receipt of a Rights Certificate, together with a completed Election to Exercise executed in accordance with Clause 2.2(d)(ii), which does not indicate that such Right is null and void as provided by Subsection 3.1(b), and payment as set forth in Clause 2.2(d)(iii), the Rights Agent (unless otherwise instructed by the Corporation in the event that the Corporation is of the opinion that the Rights cannot be exercised in accordance with this Agreement) will thereupon promptly:

(i) requisition from the transfer agent certificates representing the number of such Common Shares to be purchased (the Corporation hereby irrevocably authorizing its transfer agent to comply with all such requisitions);

(ii) when appropriate, requisition from the Corporation the amount of cash to be paid in lieu of issuing fractional Common Shares;

(iii) after receipt of the certificates referred to in Clause 2.2(e)(i), deliver the same to or upon the order of the registered holder of such Rights Certificates, registered in such name or names as may be designated by such holder; and

(iv) when appropriate, after receipt, deliver the cash referred to in Clause 2.2(e)(ii) to or to the order of the registered holder of such Rights Certificate.

(f) In case the holder of any Rights shall exercise less than all the Rights evidenced by such holder's Rights Certificate, a new Rights Certificate evidencing the Rights remaining unexercised (subject to the provisions of Subsection 6.5(a)) will be issued by the Rights Agent to such holder or to such holder's duly authorized assigns.

(g) The Corporation covenants and agrees that it will:

(i) take all such action as may be necessary and within its power to ensure that all Common Shares delivered upon exercise of Rights shall, at the time of delivery of the certificates for such Common Shares (subject to payment of the Exercise Price), be duly and validly authorized, executed, issued and delivered as fully paid and non-assessable;

(ii) take all such action as may be necessary and within its power to comply with the requirements of the *Canada Business Corporations Act*, the *Securities Act* (Alberta) and the securities laws or comparable legislation of each of the provinces of Canada and any other applicable law, rule or regulation, in connection with the issuance and delivery of the Rights Certificates and the issuance of any Common Shares upon exercise of Rights;

(iii) use reasonable efforts to cause all Common Shares issued upon exercise of Rights to be listed on the stock exchanges on which such Common Shares were traded immediately prior to the Stock Acquisition Date;

(iv) cause to be reserved and kept available out of the authorized and unissued Common Shares, the number of Common Shares that, as provided in this Agreement, will from time to time be sufficient to permit the exercise in full of all outstanding Rights;

(v) pay when due and payable, if applicable, any and all federal, provincial and municipal transfer taxes and charges (not including any income or capital taxes of the holder or exercising holder or any liability of the Corporation to withhold tax) which may be payable in respect of the original issuance or delivery of the Rights Certificates, or certificates for Common Shares to be issued upon exercise of any Rights, provided that the Corporation shall not be required to pay any transfer tax or charge which may be payable in respect of any transfer involved in the transfer or delivery of Rights Certificates or the issuance or delivery of certificates for Common Shares in a name other than that of the holder of the Rights being transferred or exercised; and

(vi) after the Separation Time, except as permitted by Section 6.1, not take (or permit any Subsidiary to take) any action if at the time such action is taken it is reasonably foreseeable that such action will diminish substantially or otherwise eliminate the benefits intended to be afforded by the Rights.

2.3 Adjustments to Exercise Price; Number of Rights

The Exercise Price, the number and kind of securities subject to purchase upon exercise of each Right and the number of Rights outstanding are subject to adjustment from time to time as provided in this Section 2.3.

(a) In the event the Corporation shall at any time after the date of this Agreement:

(i) declare or pay a dividend on Common Shares payable in Common Shares (or other securities exchangeable for or convertible into or giving a right to acquire Common Shares or other securities of the Corporation) other than pursuant to any optional stock dividend program;

(ii) subdivide or change the then outstanding Common Shares into a greater number of Common Shares;

(iii) consolidate or change the then outstanding Common Shares into a smaller number of Common Shares; or

(iv) issue any Common Shares (or other securities exchangeable for or convertible into or giving a right to acquire Common Shares or other securities of the Corporation) in respect of, in lieu of or in exchange for existing Common Shares except as otherwise provided in this Section 2.3,

the Exercise Price and the number of Rights outstanding, or, if the payment or effective date therefor shall occur after the Separation Time, the securities purchasable upon exercise of Rights shall be adjusted as of the payment or effective date in the manner set forth below.

If the Exercise Price and number of Rights outstanding are to be adjusted:

(x) the Exercise Price in effect after such adjustment will be equal to the Exercise Price in effect immediately prior to such adjustment divided by the number of Common Shares (or other capital stock) (the "Expansion Factor") that a holder of one Common Share immediately prior to such dividend, subdivision, change, consolidation or issuance would hold thereafter as a result thereof; and

(y) each Right held prior to such adjustment will become that number of Rights equal to the Expansion Factor,

and the adjusted number of Rights will be deemed to be distributed among the Common Shares and Equity Preferred Shares with respect to which the original Rights were associated (if they remain outstanding) and the shares issued in respect of such dividend, subdivision, change, consolidation or issuance, so that each such Common Share (or other capital stock) will have exactly one Right associated with it and each such Equity Preferred Share will have associated with it that number of Rights equal to the Conversion Basis (as referred to in the rights, privileges, restrictions and conditions attached to the Equity Preferred Shares) in effect following the payment or effective date of the event referred to in Clause 2.3(a)(i), (ii), (iii) or (iv), as the case may be.

For greater certainty, if the securities purchasable upon exercise of Rights are to be adjusted, the securities purchasable upon exercise of each Right after such adjustment will be the securities that a holder of the securities purchasable upon exercise of one Right immediately prior to such dividend, subdivision, change, consolidation or issuance would hold thereafter as a result of such dividend, subdivision, change, consolidation or issuance.

If, after the Record Time and prior to the Expiration Time, the Corporation shall issue any shares of capital stock other than Common Shares in a transaction of a type described in Clause 2.3(a)(i) or (iv), shares of such capital stock shall be treated herein as nearly equivalent to Common Shares as may be practicable and appropriate under the circumstances and the Corporation and the Rights Agent agree to amend this Agreement in order to effect such treatment.

In the event the Corporation shall at any time after the Record Time and prior to the Separation Time issue any Common Shares otherwise than in a transaction referred to in this Subsection 2.3(a), each such Common Share so issued shall automatically have one new Right associated with it, which Right shall be evidenced by the certificate representing such associated Common Share.

(b) In the event the Corporation shall at any time after the Record Time and prior to the Separation Time fix a record date for the issuance of rights, options or warrants to all holders of Common Shares entitling them (for a period expiring within 45 calendar days after such record date) to subscribe for or purchase Common Shares (or securities convertible into or exchangeable for or carrying a right to purchase Common Shares) at a price per Common Share (or, if a security convertible into or exchangeable for or carrying a right to purchase or subscribe for Common Shares, having a conversion, exchange or exercise price, including the price required to be paid to purchase such convertible or exchangeable security or right per share) less than the Market Price per Common Share on such record date, the Exercise Price to be in effect after such record date shall be determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction:

(i) the numerator of which shall be the number of Common Shares and Equity Preferred Shares outstanding on such record date, plus the number of Common Shares that the aggregate offering price of the total number of Common Shares so to be offered (and/or the aggregate initial conversion, exchange or exercise price of the convertible or exchangeable securities or rights so to be offered, including the price required to be paid to purchase such convertible or exchangeable securities or rights) would purchase at such Market Price per Common Share; and

(ii) the denominator of which shall be the number of Common Shares and Equity Preferred Shares outstanding on such record date, plus the number of additional Common Shares to be offered for subscription or purchase (or into which the convertible or exchangeable securities or rights so to be offered are initially convertible, exchangeable or exercisable).

In case such subscription price may be paid by delivery of consideration, part or all of which may be in a form other than cash, the value of such consideration shall be as determined in good faith by the Board of Directors, whose determination shall be described in a statement filed with the Rights Agent and shall be binding on the Rights Agent and the holders of Rights. Such adjustment shall be made successively whenever such a record date is fixed, and in the event that such rights, options or warrants are not so issued, or if issued, are not exercised prior to the expiration thereof, the Exercise Price shall be readjusted to the Exercise Price which would then be in effect if such record date had not been fixed, or to the Exercise Price which would be in effect based upon the number of Common Shares (or securities convertible into, or exchangeable or exercisable for Common Shares) actually issued upon the exercise of such rights, options or warrants, as the case may be.

For purposes of this Agreement, the granting of the right to purchase Common Shares (whether from treasury or otherwise) pursuant to the Dividend Reinvestment Plan or any employee benefit, stock option or similar plans shall be deemed not to constitute an issue of rights, options or warrants by the Corporation; provided, however, that, in all such cases, the right to purchase Common Shares is at a price per share of not less than 95 per cent of the current market price per share (determined as provided in such plans) of the Common Shares.

(c) In the event the Corporation shall at any time after the Record Time and prior to the Separation Time fix a record date for the making of a distribution to all holders of Common Shares (including any such distribution made in connection with a merger or amalgamation) of evidences of

indebtedness, cash (other than an annual cash dividend or a dividend paid in Common Shares, but including any dividend payable in securities other than Common Shares), assets or rights, options or warrants (excluding those referred to in Subsection 2.3(b)), the Exercise Price to be in effect after such record date shall be determined by multiplying the Exercise Price in effect immediately prior to such record date by a fraction:

(i) the numerator of which shall be the Market Price per Common Share on such record date, less the fair market value (as determined in good faith by the Board of Directors, whose determination shall be described in a statement filed with the Rights Agent and shall be binding on the Rights Agent and the holders of Rights), on a per share basis, of the portion of the cash, assets, evidences of indebtedness, rights, options or warrants so to be distributed; and

(ii) the denominator of which shall be such Market Price per Common Share.

Such adjustments shall be made successively whenever such a record date is fixed, and in the event that such a distribution is not so made, the Exercise Price shall be adjusted to be the Exercise Price which would have been in effect if such record date had not been fixed.

(d) Notwithstanding anything herein to the contrary, no adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least one per cent in the Exercise Price; provided, however, that any adjustments which by reason of this Subsection 2.3(d) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under Section 2.3 shall be made to the nearest cent or to the nearest ten-thousandth of a share. Notwithstanding the first sentence of this Subsection 2.3(d), any adjustment required by Section 2.3 shall be made no later than the earlier of:

(i) three years from the date of the transaction which gives rise to such adjustment; or

(ii) the Expiration Date.

(e) In the event the Corporation shall at any time after the Record Time and prior to the Separation Time issue any shares of capital stock (other than Common Shares), or rights, options or warrants to subscribe for or purchase any such capital stock, or securities convertible into or exchangeable for any such capital stock, in a transaction referred to in Clause 2.3(a)(i) or (iv), if the Board of Directors acting in good faith determines that the adjustments contemplated by Subsections 2.3(a), (b) and (c) in connection with such transaction will not appropriately protect the interests of the holders of Rights, the Board of Directors may determine what other adjustments to the Exercise Price, number of Rights and/or securities purchasable upon exercise of Rights would be appropriate and, notwithstanding Subsections 2.3(a), (b) and (c), such adjustments, rather than the adjustments contemplated by Subsections 2.3(a), (b) and (c), shall be made. The Corporation and the Rights Agent shall have authority without the approval of the holders of the Common Shares or Equity Preferred Shares or the holders of Rights to amend this Agreement as appropriate to provide for such adjustments.

(f) Each Right originally issued by the Corporation subsequent to any adjustment made to the Exercise Price hereunder shall evidence the right to purchase, at the adjusted Exercise Price, the number of Common Shares purchasable from time to time hereunder upon exercise of a Right immediately prior to such issue, all subject to further adjustment as provided herein.

(g) Irrespective of any adjustment or change in the Exercise Price or the number of Common Shares issuable upon the exercise of the Rights, the Rights Certificates theretofore and thereafter issued may continue to express the Exercise Price per Common Share and the number of Common Shares which were expressed in the initial Rights Certificates issued hereunder.

(h) In any case in which this Section 2.3 shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, the Corporation may elect to defer until the occurrence of such event the issuance to the holder of any Right exercised after such record date

the number of Common Shares and other securities of the Corporation, if any, issuable upon such exercise over and above the number of Common Shares and other securities of the Corporation, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; provided, however, that the Corporation shall deliver to such holder an appropriate instrument evidencing such holder's right to receive such additional shares (fractional or otherwise) or other securities upon the occurrence of the event requiring such adjustment.

(i) Notwithstanding anything contained in this Section 2.3 to the contrary, the Corporation shall be entitled to make such reductions in the Exercise Price, in addition to those adjustments expressly required by this Section 2.3, as and to the extent that in their good faith judgment the Board of Directors shall determine to be advisable, in order that any:

(i) consolidation or subdivision of Common Shares;

(ii) issuance (wholly or in part for cash) of Common Shares or securities that by their terms are convertible into or exchangeable for Common Shares;

(iii) stock dividends; or

(iv) issuance of rights, options or warrants referred to in this Section 2.3,

hereafter made by the Corporation to holders of its Common Shares, shall not be taxable to such shareholders.

2.4 Date on Which Exercise Is Effective

Each Person in whose name any certificate for Common Shares or other securities, if applicable, is issued upon the exercise of Rights shall for all purposes be deemed to have become the holder of record of the Common Shares or other securities, if applicable, represented thereon, and such certificate shall be dated the date upon which the Rights Certificate evidencing such Rights was duly surrendered in accordance with Subsection 2.2(d) (together with a duly completed Election to Exercise) and payment of the Exercise Price for such Rights (and any applicable transfer taxes and other governmental charges payable by the exercising holder hereunder) was made; provided, however, that if the date of such surrender and payment is a date upon which the Common Share transfer books of the Corporation are closed, such Person shall be deemed to have become the record holder of such shares on, and such certificate shall be dated, the next succeeding Business Day on which the Common Share transfer books of the Corporation are open.

2.5 Execution, Authentication, Delivery and Dating of Rights Certificates

(a) The Rights Certificates shall be executed on behalf of the Corporation by its Chairman of the Board, President or any Vice-President and by its Corporate Secretary or any Assistant Secretary under the corporate seal of the Corporation reproduced thereon. The signature of any of these officers on the Rights Certificates may be manual or facsimile. Rights Certificates bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Corporation shall bind the Corporation, notwithstanding that such individuals or any of them have ceased to hold such offices either before or after the countersignature and delivery of such Rights Certificates.

(b) Promptly after the Corporation learns of the Separation Time, the Corporation will notify the Rights Agent of such Separation Time and will deliver Rights Certificates executed by the Corporation to the Rights Agent for countersignature, and the Rights Agent shall manually countersign (in a manner satisfactory to the Corporation) and send such Rights Certificates to the holders of the Rights pursuant to Subsection 2.2(c) hereof. No Rights Certificate shall be valid for any purpose until countersigned by the Rights Agent as aforesaid.

(c) Each Rights Certificate shall be dated the date of countersignature thereof.

2.6 Registration, Transfer and Exchange

(a) The Corporation will cause to be kept a register (the "Rights Register") in which, subject to such reasonable regulations as it may prescribe, the Corporation will provide for the registration and transfer of Rights. The Rights Agent is hereby appointed registrar for the Rights (the "Rights Registrar") for the purpose of maintaining the Rights Register for the Corporation and registering Rights and transfers of Rights as herein provided and the Rights Agent hereby accepts such appointment. In the event that the Rights Agent shall cease to be the Rights Registrar, the Rights Agent will have the right to examine the Rights Register at all reasonable times.

After the Separation Time and prior to the Expiration Time, upon surrender for registration of transfer or exchange of any Rights Certificate, and subject to the provisions of Subsection 2.6(c), the Corporation will execute, and the Rights Agent will manually countersign and deliver, in the name of the holder or the designated transferee or transferees, as required pursuant to the holder's instructions, one or more new Rights Certificates evidencing the same aggregate number of Rights as did the Rights Certificates so surrendered.

(b) All Rights issued upon any registration of transfer or exchange of Rights Certificates shall be the valid obligations of the Corporation, and such Rights shall be entitled to the same benefits under this Agreement as the Rights surrendered upon such registration of transfer or exchange.

(c) Every Rights Certificate surrendered for registration of transfer or exchange shall be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Corporation or the Rights Agent, as the case may be, duly executed by the holder thereof or such holder's attorney duly authorized in writing. As a condition to the issuance of any new Rights Certificate under this Section 2.6, the Corporation may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the reasonable fees and expenses of the Rights Agent) connected therewith.

2.7 Mutilated, Destroyed, Lost and Stolen Rights Certificates

(a) If any mutilated Rights Certificate is surrendered to the Rights Agent prior to the Expiration Time, the Corporation shall execute and the Rights Agent shall countersign and deliver in exchange therefor a new Rights Certificate evidencing the same number of Rights as did the Rights Certificate so surrendered.

(b) If there shall be delivered to the Corporation and the Rights Agent prior to the Expiration Time:

(i) evidence to their reasonable satisfaction of the destruction, loss or theft of any Rights Certificate; and

(ii) such security or indemnity as may be reasonably required by them to save each of them and any of their agents harmless, then, in the absence of notice to the Corporation or the Rights Agent that such Rights Certificate has been acquired by a *bona fide* purchaser, the Corporation shall execute and upon the Corporation's request the Rights Agent shall countersign and deliver, in lieu of any such destroyed, lost or stolen Rights Certificate, a new Rights Certificate evidencing the same number of Rights as did the Rights Certificate so destroyed, lost or stolen.

(c) As a condition to the issuance of any new Rights Certificate under this Section 2.7, the Corporation may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the reasonable fees and expenses of the Rights Agent) connected therewith.

(d) Every new Rights Certificate issued pursuant to this Section 2.7 in lieu of any destroyed, lost or stolen Rights Certificate shall evidence the contractual obligation of the Corporation, whether or not the destroyed, lost or stolen Rights Certificate shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Agreement equally and proportionately with any and all other Rights duly issued hereunder.

2.8 Persons Deemed Owners of Rights

The Corporation, the Rights Agent and any agent of the Corporation or the Rights Agent may deem and treat the Person in whose name a Rights Certificate (or, prior to the Separation Time, the associated Common Share or Equity Preferred Share certificate) is registered as the absolute owner thereof and of the Rights evidenced thereby for all purposes whatsoever. As used in this Agreement, unless the context otherwise requires, the term "holder" of any Right shall mean the registered holder of such Right (or, prior to the Separation Time, of the associated Common Share or Equity Preferred Share).

2.9 Delivery and Cancellation of Certificates

All Rights Certificates surrendered upon exercise or for redemption, registration of transfer or exchange shall, if surrendered to any Person other than the Rights Agent, be delivered to the Rights Agent and, in any case, shall be promptly cancelled by the Rights Agent. The Corporation may at any time deliver to the Rights Agent for cancellation any Rights Certificates previously countersigned and delivered hereunder which the Corporation may have acquired in any manner whatsoever, and all Rights Certificates so delivered shall be promptly cancelled by the Rights Agent. No Rights Certificate shall be countersigned in lieu of or in exchange for any Rights Certificates cancelled as provided in this Section 2.9, except as expressly permitted by this Agreement. The Rights Agent shall, subject to applicable laws, destroy all cancelled Rights Certificates and deliver a certificate of destruction to the Corporation.

2.10 Agreement of Rights Holders

Every holder of Rights, by accepting the same, consents and agrees with the Corporation and the Rights Agent and with every other holder of Rights and Debenture Rights:

(a) to be bound by and subject to the provisions of this Agreement, as amended from time to time in accordance with the terms hereof, in respect of all Rights held;

(b) that prior to the Separation Time, each Right will be transferable only together with, and will be transferred by a transfer of, the associated Common Share or Equity Preferred Share certificate representing such Right;

(c) that after the Separation Time, the Rights Certificates will be transferable only on the Rights Register as provided herein;

(d) that prior to due presentment of a Rights Certificate (or, prior to the Separation Time, the associated Common Share or Equity Preferred Share certificate) for registration of transfer, the Corporation, the Rights Agent and any agent of the Corporation or the Rights Agent may deem and treat the Person in whose name the Rights Certificate (or, prior to the Separation Time, the associated Common Share or Equity Preferred Share certificate) is registered as the absolute owner thereof and of the Rights evidenced thereby (notwithstanding any notations of ownership or writing on such Rights Certificate or the associated Common Share or Equity Preferred Share certificate made by anyone other than the Corporation or the Rights Agent) for all purposes whatsoever, and neither the Corporation nor the Rights Agent shall be affected by any notice to the contrary;

(e) that such holder of Rights has waived his right to receive any fractional Rights or any fractional shares or other securities upon exercise of a Right (except as provided herein); and

(f) that, subject to the provisions of Section 6.4, without the approval of any holder of Rights or Voting Shares and upon the sole authority of the Board of Directors, acting in good faith, this Agreement may be supplemented or amended from time to time to cure any ambiguity or to correct or supplement any provision contained herein which may be inconsistent with the intent of this Agreement or is otherwise defective, as provided herein.

2.11 Rights Certificate Holder Not Deemed a Shareholder

No holder, as such, of any Rights or Rights Certificate shall be entitled to vote, receive dividends or be deemed for any purpose whatsoever the holder of any Common Share or any other share or security of the Corporation which may at any time be issuable on the exercise of the Rights represented thereby, nor shall anything contained herein or in any Rights Certificate be construed or deemed or confer upon the holder of any Right or Rights Certificate, as such, any right, title, benefit or privilege of a holder of Common Shares or any other shares or securities of the Corporation or any right to vote at any meeting of shareholders of the Corporation whether for the election of directors or otherwise or upon any matter submitted to holders of Common Shares or any other shares of the Corporation at any meeting thereof, or to give or withhold consent to any action of the Corporation, or to receive notice of any meeting or other action affecting any holder of Common Shares or any other shares of the Corporation except as expressly provided herein, or to receive dividends, distributions or subscription rights, or otherwise, until the Right or Rights evidenced by Rights Certificates shall have been duly exercised in accordance with the terms and provisions hereof.

ARTICLE 3 — ADJUSTMENTS TO THE RIGHTS

3.1 Flip-in Event

(a) Subject to Subsection 3.1(b) and Section 6.1, in the event that prior to the Expiration Time a Flip-in Event shall occur, each Right shall constitute, effective at the close of business on the eighth Trading Day after the Stock Acquisition Date, the right to purchase from the Corporation, upon exercise thereof in accordance with the terms hereof, that number of Common Shares having an aggregate Market Price on the date of consummation or occurrence of such Flip-in Event equal to twice the Exercise Price for an amount in cash equal to the Exercise Price (such right to be appropriately adjusted in a manner analogous to the applicable adjustment provided for in Section 2.3 in the event that after such consummation or occurrence, an event of a type analogous to any of the events described in Section 2.3 shall have occurred).

(b) Notwithstanding anything in this Agreement to the contrary, upon the occurrence of any Flip-in Event, any Rights that are or were Beneficially Owned on or after the earlier of the Separation Time or the Stock Acquisition Date by:

(i) an Acquiring Person (or any Affiliate or Associate of an Acquiring Person or any Person acting jointly or in concert with an Acquiring Person or any Affiliate or Associate of an Acquiring Person); or

(ii) a transferee of Rights, directly or indirectly, from an Acquiring Person (or any Affiliate or Associate of an Acquiring Person or any Person acting jointly or in concert with an Acquiring Person or any Affiliate or Associate of an Acquiring Person), where such transferee becomes a transferee concurrently with or subsequent to the Acquiring Person becoming such in a transfer that the Board of Directors has determined is part of a plan, arrangement or scheme of an Acquiring Person (or any Affiliate or Associate of an Acquiring Person or any Person acting jointly or in concert with an Acquiring Person or any Affiliate or Associate of an Acquiring Person), that has the purpose or effect of avoiding Clause 3.1(b)(i),

shall become null and void without any further action, and any holder of such Rights (including transferees) shall thereafter have no right to exercise such Rights under any provision of this Agreement and further shall thereafter not have any other rights whatsoever with respect to such Rights, whether under any provision of this Agreement or otherwise.

(c) From and after the Separation Time, the Corporation shall do all such acts and things as shall be necessary and within its power to ensure compliance with the provisions of this Section 3.1, including without limitation, all such acts and things as may be required to satisfy the requirements of the

Canada Business Corporations Act, the *Securities Act* (Alberta) and the securities laws or comparable legislation of each of the provinces of Canada in respect of the issue of Common Shares upon the exercise of Rights in accordance with this Agreement.

(d) Any Rights Certificate that represents Rights Beneficially Owned by a Person described in either Clause 3.1(b)(i) or (ii) or transferred to any nominee of any such Person, and any Rights Certificate issued upon transfer, exchange, replacement or adjustment of any other Rights Certificate referred to in this sentence, shall contain the following legend:

> The Rights represented by this Rights Certificate were issued to a Person who was an Acquiring Person or an Affiliate or an Associate of an Acquiring Person (as such terms are defined in the Shareholder Rights Plan Agreement) or a Person who was acting jointly or in concert with an Acquiring Person or an Affiliate or Associate of an Acquiring Person. This Rights Certificate and the Rights represented hereby are void or shall become void in the circumstances specified in Subsection 3.1(b) of the Shareholder Rights Plan Agreement.

provided, however, that the Rights Agent shall not be under any responsibility to ascertain the existence of facts that would require the imposition of such legend but shall impose such legend only if instructed to do so by the Corporation in writing or if a holder fails to certify upon transfer or exchange in the space provided on the Rights Certificate that such holder is not a Person described in such legend.

3.2 Exchange Option

(a) If the Board of Directors acting in good faith shall determine that conditions exist which would eliminate or otherwise materially diminish in any respect the benefits intended to be afforded to the holders of Rights and Debenture Rights pursuant to this Agreement the Board of Directors may, at its option and without seeking the approval of holders of Common Shares, Convertible Debentures, Rights or Debenture Rights, at any time after a Flip-in Event has occurred, authorize the Corporation to issue or deliver in respect of each Right which is not void pursuant to Subsection 3.1(b), either:

(i) in return for the Exercise Price and the Right, cash, debt, equity or other securities or other property or assets (or a combination thereof) having a value equal to twice the Exercise Price; or

(ii) in return for the Right and without further charge, subject to any amounts that may be required to be paid under applicable law, cash, debt, equity or other securities or other property or assets (or a combination thereof) having a value equal to the Exercise Price;

in full and final settlement of all rights attaching to the Rights; provided that the value of any such debt, equity or other securities or other property or assets shall be determined by the Board of Directors who may rely for that purpose on the advice of a nationally recognized Canadian firm of investment dealers or investment bankers selected by the Board of Directors. To the extent that the Board of Directors determines in good faith that any action need be taken pursuant to this Section 3.2, the Board of Directors may suspend the exerciseability of the Rights for a period of up to 60 days following the date of the occurrence of the relevant Flip-In Event in order to determine the appropriate form and value of cash, debt, equity or other securities or other property or assets (or combination thereof) to be issued or delivered on such exchange for Rights. In the event of any such suspension, the Corporation shall notify the Rights Agent and issue as promptly as practicable a public announcement stating that the exerciseability of the Rights has been temporarily suspended.

(b) If the Board of Directors authorizes the exchange of cash, debt, equity or other securities or other property or assets (or a combination thereof) for Rights pursuant to Subsection 3.2(a) then, without any further action or notice, the only right thereafter of a holder of Rights shall be to receive upon due exercise or exchange of the Rights such cash, debt, equity or other securities or other property

or assets (or a combination thereof) in accordance with the determination of the Board of Directors made pursuant to Subsection 3.2(a). Within 10 Business Days after the Board of Directors has authorized the exchange of such cash, debt, equity or other securities or other property or assets (or a combination thereof) pursuant to Subsection 3.2(a), the Corporation shall give notice of such exchange to the holders of Rights in accordance with Section 6.9. Each such notice will state the method by which the exchange of cash, debt, equity or other securities or other property or assets (or a combination thereof) for Rights will be effected.

(c) If there shall not be sufficient securities authorized but unissued to permit the exchange in full of Rights pursuant to this Section 3.2, the Corporation shall take all such action as may be necessary to authorize additional securities for issuance upon the exchange of Rights provided, however, that the Corporation shall not be required to issue fractions of securities or to distribute certificates evidencing fractional securities. In lieu of issuing such fractional securities, subject to Subsection 6.5(b), there shall be paid to the registered holders of Rights to whom such fractional securities would otherwise be issuable, an amount in cash equal to the same fraction of the Market Price of a whole such security.

ARTICLE 4 — THE RIGHTS AGENT

4.1 General

(a) The Corporation hereby appoints the Rights Agent to act as agent for the Corporation and the holders of the Rights and the Debenture Rights in accordance with the terms and conditions hereof, and the Rights Agent hereby accepts such appointment. The Corporation may from time to time appoint such co-Rights Agents ("Co-Rights Agents") as it may deem necessary or desirable. In the event the Corporation appoints one or more Co-Rights Agents, the respective duties of the Rights Agent and Co-Rights Agents shall be as the Corporation may determine. The Corporation agrees to pay all reasonable fees and expenses of the Rights Agent in respect of the performance of its duties under this Agreement The Corporation also agrees to indemnify the Rights Agent for, and to hold it harmless against, any loss, liability, or expense, incurred without negligence, bad faith or wilful misconduct on the part of the Rights Agent, for anything done or omitted by the Rights Agent in connection with the acceptance and administration of this Agreement, including the costs and expenses of defending against any claim of liability, which right to indemnification will survive the termination of this Agreement.

(b) The Rights Agent shall be protected and shall incur no liability for or in respect of any action taken, suffered or omitted by it in connection with its administration of this Agreement in reliance upon any certificate for Common Shares, Equity Preferred Shares or Convertible Debentures, Rights Certificate, certificate for other securities of the Corporation, instrument of assignment or transfer, power of attorney, endorsement, affidavit, letter, notice, direction, consent, certificate, statement, or other paper or document believed by it to be genuine and to be signed, executed and, where necessary, verified or acknowledged, by the proper Person or Persons.

4.2 Merger, Amalgamation or Consolidation or Change of Name of Rights Agent

(a) Any corporation into which the Rights Agent may be merged or amalgamated or with which it may be consolidated, or any corporation resulting from any merger, amalgamation, statutory arrangement or consolidation to which the Rights Agent is a party, or any corporation succeeding to the shareholder or stockholder services business of the Rights Agent, will be the successor to the Rights Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor Rights Agent under the provisions of Section 4.4 hereof. In case at the time such successor Rights Agent succeeds to the agency created by this Agreement any of the Rights Certificates have been countersigned but not delivered, any successor Rights Agent may adopt the countersignature of the predecessor Rights Agent and deliver such Rights Certificates

so countersigned; and in case at that time any of the Rights have not been countersigned, any successor Rights Agent may countersign such Rights Certificates in the name of the predecessor Rights Agent or in the name of the successor Rights Agent; and in all such cases such Rights Certificates will have the full force provided in the Rights Certificates and in this Agreement.

(b) In case at any time the name of the Rights Agent is changed and at such time any of the Rights Certificates shall have been countersigned but not delivered, the Rights Agent may adopt the countersignature under its prior name and deliver Rights Certificates so countersigned; and in case at that time any of the Rights Certificates shall not have been countersigned, the Rights Agent may countersign such Rights Certificates either in its prior name or in its changed name; and in all such cases such Rights Certificates shall have the full force provided in the Rights Certificates and in this Agreement.

4.3 Duties of Rights Agent

The Rights Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, all of which the Corporation and the holders of certificates for Common Shares, Equity Preferred Shares and Convertible Debentures and the holders of Rights Certificates, by their acceptance thereof, shall be bound:

(a) the Rights Agent may consult with legal counsel (who may be legal counsel for the Corporation) and the opinion of such counsel will be full and complete authorization and protection to the Rights Agent as to any action taken or omitted by it in good faith and in accordance with such opinion;

(b) whenever in the performance of its duties under this Agreement, the Rights Agent deems it necessary or desirable that any fact or matter be proved or established by the Corporation prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by a Person believed by the Rights Agent to be the Chairman of the Board, President, any Vice-President, Treasurer, Corporate Secretary, or any Assistant Secretary of the Corporation and delivered to the Rights Agent; and such certificate will be full authorization to the Rights Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate;

(c) the Rights Agent will be liable hereunder for its own negligence, bad faith or wilful misconduct;

(d) the Rights Agent will not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the certificates for Common Shares, certificates for Equity Preferred Shares, certificates for Convertible Debentures or the Rights Certificates (except its countersignature thereof) or be required to verify the same, but all such statements and recitals are and will be deemed to have been made by the Corporation only;

(e) the Rights Agent will not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due authorization, execution and delivery hereof by the Rights Agent) or in respect of the validity or execution of any certificate for a Common Share, Equity Preferred Share or Convertible Debenture or Rights Certificate (except its countersignature thereof); nor will it be responsible for any breach by the Corporation of any covenant or condition contained in this Agreement or in any Rights Certificate; nor will it be responsible for any change in the exerciseability of the Rights (including the Rights becoming void pursuant to Subsection 3.1(b) hereof) or any adjustment required under the provisions of Section 2.3 hereof or responsible for the manner, method or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment (except with respect to the exercise of Rights after receipt of the certificate contemplated by Section 2.3 describing any such adjustment); nor will it by any act hereunder be deemed to make any representation or warranty as to the authorization of any Common Shares to be issued pursuant to this Agreement or any Rights or Debenture Rights or as to whether any Common Shares will, when issued, be duly and validly authorized, executed, issued and delivered and fully paid and non-assessable;

(f) the Corporation agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the Rights Agent for the carrying out or performing by the Rights Agent of the provisions of this Agreement;

(g) the Rights Agent is hereby authorized and directed to accept instructions in writing with respect to the performance of its duties hereunder from any individual believed by the Rights Agent to be the Chairman of the Board, President, any Vice-President, Treasurer, Corporate Secretary or any Assistant Secretary of the Corporation, and to apply to such individuals for advice or instructions in connection with its duties, and it shall not be liable for any action taken or suffered by it in good faith in accordance with instructions of any such individual;

(h) the Rights Agent and any shareholder or stockholder, director, officer or employee of the Rights Agent may buy, sell or deal in Common Shares, Equity Preferred Shares, Convertible Debentures, Rights, Debenture Rights or other securities of the Corporation or become pecuniarily interested in any transaction in which the Corporation may be interested, or contract with or lend money to the Corporation or otherwise act as fully and freely as though it were not Rights Agent under this Agreement. Nothing herein shall preclude the Rights Agent from acting in any other capacity for the Corporation or for any other legal entity; and

(i) the Rights Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys or agents, and the Rights Agent will not be answerable or accountable for any act, default, neglect or misconduct of any such attorneys or agents or for any loss to the Corporation resulting from any such act, default, neglect or misconduct, provided reasonable care was exercised in the selection and continued employment thereof.

4.4 Change of Rights Agent

The Rights Agent may resign and be discharged from its duties under this Agreement upon 60 days' notice (or such lesser notice as is acceptable to the Corporation) in writing mailed to the Corporation and to each transfer agent of Common Shares, Equity Preferred Shares and Convertible Debentures by registered or certified mail. The Corporation may remove the Rights Agent upon 60 days' notice in writing, mailed to the Rights Agent and to each transfer agent of the Common Shares, Equity Preferred Shares and Convertible Debentures by registered or certified mail. If the Rights Agent should resign or be removed or otherwise become incapable of acting, the Corporation will appoint a successor to the Rights Agent. If the Corporation fails to make such appointment within a period of 60 days after such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Rights Agent, then by prior written notice to the Corporation the resigning Rights Agent or the holder of any Rights or Debenture Rights (which holder shall, with such notice, submit such holder's Rights Certificate, if any, for inspection by the Corporation), may apply to any court of competent jurisdiction for the appointment of a new Rights Agent. Any successor Rights Agent, whether appointed by the Corporation or by such a court, shall be a corporation incorporated under the laws of Canada or a province thereof authorized to carry on the business of a trust company in the Province of Alberta. After appointment, the successor Rights Agent will be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Rights Agent without further act or deed; but the predecessor Rights Agent shall deliver and transfer to the successor Rights Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment, the Corporation will file notice thereof in writing with the predecessor Rights Agent and each transfer agent of the Common Shares, Equity Preferred Shares and Convertible Debentures, and mail a notice thereof in writing to the holders of the Rights and the Debenture Rights in accordance with Section 6.9. Failure to give any notice provided for in this Section 4.4, however, or any defect therein, shall not affect the legality or validly of the resignation or removal of the Rights Agent or the appointment of any successor Rights Agent, as the case may be.

ARTICLE 5 — DEBENTURE RIGHTS

5.1 Convertible Debenture Certificates

Certificates representing Convertible Debentures which are issued after the Record Time but prior to the earlier of the Separation Time and the Expiration Time, shall also evidence one Debenture Right for each $1,000 principal amount of Convertible Debentures represented thereby and each Debenture Right will be transferable only together with, and will be transferred by a transfer of, such Convertible Debentures. Each such certificate shall have impressed on, printed on, written on or otherwise affixed to it the following legend:

> Until the Separation Time (defined in the Shareholder Rights Agreement referred to below), this certificate also evidences rights of the holder described in a Shareholder Rights Plan Agreement dated as of December 2, 1994 (the "Shareholder Rights Agreement") between TransCanada PipeLines Limited (the "Corporation") and Montreal Trust Company of Canada, as supplemented and amended, the terms of which are incorporated herein by reference and a copy of which is on file at the principal executive offices of the Corporation. Under certain circumstances set out in the Shareholder Rights Agreement, the rights may expire, may become null and void or may be evidenced by separate certificates and no longer evidenced by this certificate. The Corporation will mail or arrange for the mailing of a copy of the Shareholder Rights Agreement to the holder of this certificate without charge as soon as practicable after the receipt of a written request therefor.

Certificates for the Convertible Debentures outstanding at the Record Time shall evidence one Debenture Right for each $1,000 principal amount of Convertible Debentures represented thereby notwithstanding the absence of the foregoing legend, until the close of business on the earlier of the Separation Time and the Expiration Time. Each Debenture Right will be transferable only together with, and will be transferred by a transfer of, such Convertible Debentures. Notwithstanding any other provision of this Agreement, any Debenture Rights held by the Corporation or any of its Subsidiaries shall be void.

5.2 Conversion of Debenture Rights

(a) Each Debenture Right will entitle the holder thereof, prior to the earlier of the Separation Time and the Expiration Time, to one Right for each whole Common Share issued to the holder upon due exercise of the conversion privilege attached to the Convertible Debentures associated with such Debenture Right without any further payment therefor, and upon such issuance of a Common Share, the Debenture Right shall be deemed to have been automatically converted into one Right for each Common Share so issued, such Right to be evidenced by the certificate evidencing such Common Share as provided in Section 2.1. The holder of a Debenture Right shall not be entitled to, and the Corporation shall not be required to issue, any fraction of a Right or any payment in lieu thereof on exercise of such conversion privilege.

(b) In the event the Separation Time occurs prior to the Convertible Debentures being converted to Common Shares, each Debenture Right will entitle the holder thereof to one Right for each whole Common Share into which the Convertible Debentures are then convertible at the then applicable conversion price and, as of the Separation Time, such holder's Debenture Rights shall be deemed to have automatically become one Right for each such whole Common Share.

5.3 Persons Deemed Owners

The Rights Agent and any agent of the Corporation or the Rights Agent may deem and treat the Person in whose name a certificate for the Convertible Debentures is registered as the absolute owner thereof and of the Debenture Rights evidenced thereby for all purposes whatsoever. As used in this Agreement, unless the context otherwise requires, the term "holder" of any Debenture Rights shall mean the registered holder of the associated Convertible Debentures.

5.4 Agreement of Debenture Rights Holders

Every holder of Debenture Rights by accepting the same consents and agrees with the Corporation and the Rights Agent and with every other holder of Debenture Rights and Rights that:

(a) he will be bound by and subject to the provisions of this Agreement, as amended from time to time in accordance with the terms hereof, in respect of all Debenture Rights held;

(b) each Debenture Right will be transferable only together with, and will be transferred by a transfer of, the associated Convertible Debentures;

(c) the Corporation, the Rights Agent and any agent of the Corporation or the Rights Agent may deem and treat the person in whose name the associated Convertible Debentures certificate is registered as the absolute owner thereof and of the Debenture Rights evidenced thereby (notwithstanding any notations of ownership or writing on such associated Convertible Debentures certificate made by anyone other than the Corporation or the Rights Agent) for all purposes whatsoever, and neither the Corporation nor the Rights Agent shall be affected by any notice to the contrary; and

(d) without the approval of any holder of Debenture Rights and upon the sole authority of the Board of Directors, acting in good faith, this Agreement may be supplemented or amended from time to time to cure any ambiguity or to correct or supplement any provision contained herein which may be inconsistent with the intent of this Agreement or is otherwise defective, as provided herein.

ARTICLE 6 — MISCELLANEOUS

6.1 Redemption and Waiver

(a) The Board of Directors acting in good faith may, until the occurrence of a Flip-in Event, upon prior written notice delivered to the Rights Agent, determine to waive the application of Section 3.1 to such particular Flip-in Event (which for greater certainty shall not include the circumstances described in Subsection 6.1(h)); provided that if the Board of Directors waives the application of Section 3.1 to a particular Flip-in Event pursuant to this Subsection 6.1(a), the Board of Directors shall be deemed to have waived the application of Section 3.1 to any other Flip-in Event.

(b) The Board of Directors of the Corporation acting in good faith may, at its option, at any time prior to the provisions of Section 3.1 becoming applicable as a result of the occurrence of a Flip-in Event, elect to redeem all but not less than all of the outstanding Rights and Debenture Rights at a redemption price of $0.001 per Right or Debenture Right appropriately adjusted in a manner analogous to the applicable adjustment provided for in Section 2.3 if an event of the type analogous to any of the events described in Section 2.3 shall have occurred (such redemption price being herein referred to as the "Redemption Price").

(c) In the event that prior to the occurrence of a Flip-in Event a Person acquires, pursuant to a Permitted Bid or a Competing Permitted Bid, not less than 90% of the outstanding Common Shares other than Common Shares Beneficially Owned at the date of the Permitted Bid or the Competing Permitted Bid by such Person, then the Board of Directors of the Corporation shall immediately upon the consummation of such acquisition without further formality be deemed to have elected to redeem the Rights and the Debenture Rights at the Redemption Price.

(d) Where a Take-over Bid that is not a Permitted Bid Acquisition is withdrawn or otherwise terminated after the Separation Time has occurred and prior to the occurrence of a Flip-in Event, the Board of Directors may elect to redeem all the outstanding Rights at the Redemption Price.

(e) If the Board of Directors is deemed under Subsection 6.1(c) to have elected, or elects under either of Subsection 6.1(b) or (d), to redeem the Rights, the right to exercise the Rights and the Debenture Rights, will thereupon, without further action and without notice, terminate and the only right thereafter of the holders of Rights and Debenture Rights shall be to receive the Redemption Price.

(f) Within 10 days after the Board of Directors is deemed under Subsection 6.1(c) to have elected, or elects under Subsection 6.1(b) or (d), to redeem the Rights and Debenture Rights, the Corporation shall give notice of redemption to the holders of the then outstanding Rights and Debenture Rights by mailing such notice to each such holder at his last address as it appears upon the registry books of the Rights Agent or, prior to the Separation Time, on the registry books of the transfer agent for the Voting Shares, Equity Preferred Shares or Convertible Debentures. Any notice which is mailed in the manner herein provided shall be deemed given, whether or not the holder receives the notice. Each such notice of redemption will state the method by which the payment of the Redemption Price will be made.

(g) Upon the Rights being redeemed pursuant to Subsection 6.1(d), all the provisions of this Agreement shall continue to apply as if the Separation Time had not occurred and Rights Certificates representing the number of Rights held by each holder of record of Common Shares, Equity Preferred Shares and Convertible Debentures as of the Separation Time had not been mailed to each such holder and for all purposes of this Agreement the Separation Time shall be deemed not to have occurred.

(h) The Board of Directors may waive the application of Section 3.1 in respect of the occurrence of any Flip-in Event if the Board of Directors has determined within eight Trading Days following a Stock Acquisition Date that a Person became an Acquiring Person by inadvertence and without any intention to become, or knowledge that it would become, an Acquiring Person under this Agreement and, in the event that such a waiver is granted by the Board of Directors, such Stock Acquisition Date shall be deemed not to have occurred. Any such waiver pursuant to this Subsection 6.1(h) must be on the condition that such Person, within 14 days after the foregoing determination by the Board of Directors or such earlier or later date as the Board of Directors may determine (the "Disposition Date"), has reduced its Beneficial Ownership of Voting Shares such that the Person is no longer an Acquiring Person. If the Person remains an Acquiring Person at the close of business on the Disposition Date, the Disposition Date shall be deemed to be the date of occurrence of a further Stock Acquisition Date and Section 3.1 shall apply thereto.

6.2 Expiration

No Person shall have any rights whatsoever pursuant to this Agreement or in respect of any Right or Debenture Right after the Expiration Time, except the Rights Agent as specified in Subsection 4.1(a) of this Agreement.

6.3 Issuance of New Rights Certificates

Notwithstanding any of the provisions of this Agreement, the Rights or the Debenture Rights to the contrary, the Corporation may, at its option, issue new Rights Certificates evidencing Rights in such form as may be approved by the Board of Directors to reflect any adjustment or change in the number or kind or class of securities purchasable upon exercise of Rights made in accordance with the provisions of this Agreement.

6.4 Supplements and Amendments

(a) The Corporation may make amendments to this Agreement to correct any clerical or typographical error or which are required to maintain the validity of this Agreement as a result of any change in any applicable legislation or regulations thereunder. The Corporation may, prior to the date of the shareholders' meeting referred to in Section 6.15, supplement or amend this Agreement without the approval of any holders of Rights or Debenture Rights or Voting Shares in order to make any changes which the Board of Directors acting in good faith may deem necessary or desirable. Notwithstanding anything in this Section 6.4 to the contrary, no such supplement or amendment shall be made to the provisions of Article 4 except with the written concurrence of the Rights Agent to such supplement or amendment.

(b) Subject to the Section 6.4(a), the Corporation may, with the prior consent of the holders of Voting Shares obtained as set forth below, at any time prior to the Separation Time, amend, vary or rescind any of the provisions of this Agreement and the Rights or Debenture Rights (whether or not such action would materially adversely affect the interests of the holders of Rights or Debenture Rights generally). Such consent shall be deemed to have been given if the action requiring such approval is authorized by the affirmative vote of a majority of the votes cast by Independent Shareholders present or represented at and entitled to be voted at a meeting of the holders of Voting Shares duly called and held in compliance with applicable laws and the articles and by-laws of the Corporation.

(c) The Corporation may, with the prior consent of the holders of Rights, at any time on or after the Stock Acquisition Date, amend, vary or delete any of the provisions of this Agreement and the Rights (whether or not such action would materially adversely affect the interests of the holders of Rights generally), provided that no such amendment, variation or deletion shall be made to the provisions of Article 4 except with the written concurrence of the Rights Agent thereto. Such consent shall be deemed to have been given if such amendment, variation or deletion is authorized by the affirmative votes of the holders of Rights present or represented at and entitled to be voted at a meeting of the holders and representing 50% plus one of the votes cast in respect thereof.

(d) Any approval of the holders of Rights shall be deemed to have been given if the action requiring such approval is authorized by the affirmative votes of the holders of Rights present or represented at and entitled to be voted at a meeting of the holders of Rights and representing a majority of the votes cast in respect thereof. For the purposes hereof, each outstanding Right (other than Rights which are void pursuant to the provisions hereof) shall be entitled to one vote, and the procedures for the calling, holding and conduct of the meeting shall be those, as nearly as may be, which are provided in the Corporation's by-laws and the *Canada Business Corporations Act* with respect to meetings of shareholders of the Corporation.

(e) Any amendments made by the Corporation to this Agreement pursuant to Subsection 6.4(a) which are required to maintain the validity of this Agreement as a result of any change in any applicable legislation or regulation thereunder shall:

(i) if made before the Separation Time, be submitted to the shareholders of the Corporation at the next meeting of shareholders and the shareholders may, by the majority referred to in Subsection 6.4(b), confirm or reject such amendment;

(ii) if made after the Separation Time, be submitted to the holders of Rights at a meeting to be called for on a date not later than immediately following the next meeting of shareholders of the Corporation and the holders of Rights may, by resolution passed by the majority referred to in Subsection 6.4(d), confirm or reject such amendment.

Any such amendment shall be effective from the date of the resolution of the Board of Directors adopting such amendment, until it is confirmed or rejected or until it ceases to be effective (as described in the next sentence) and, where such amendment is confirmed, it continues in effect in the form so confirmed. If such amendment is rejected by the shareholders or the holders of Rights or is not submitted to the shareholders or holders of Rights as required, then such amendment shall cease to be effective from and after the termination of the meeting at which it was rejected or to which it should have been but was not submitted or from and after the date of the meeting of holders of Rights that should have been but was not held, and no subsequent resolution of the Board of Directors to amend this Agreement to substantially the same effect shall be effective until confirmed by the shareholders or holders of Rights as the case may be.

6.5 Fractional Rights and Fractional Shares

(a) The Corporation shall not be required to issue fractions of Rights or to distribute Rights Certificates which evidence fractional Rights. After the Separation Time, in lieu of issuing fractional Rights,

the Corporation shall pay to the holders of record of the Rights Certificates (provided the Rights represented by such Rights Certificates are not void pursuant to the provisions of Subsection 3.1(b), at the time such fractional Rights would otherwise be issuable), an amount in cash equal to the fraction of the Market Price of one whole Right that the fraction of a Right that would otherwise be issuable is of one whole Right.

(b) The Corporation shall not be required to issue fractions of Common Shares upon exercise of Rights or to distribute certificates which evidence fractional Common Shares. In lieu of issuing fractional Common Shares, the Corporation shall pay to the registered holders of Rights Certificates, at the time such Rights are exercised as herein provided, an amount in cash equal to the fraction of the Market Price of one Common Share that the fraction of a Common Share that would otherwise be issuable upon the exercise of such Right is of one whole Common Share at the date of such exercise.

6.6 Rights of Action

Subject to the terms of this Agreement, all rights of action in respect of this Agreement, other than rights of action vested solely in the Rights Agent, are vested in the respective holders of the Rights and the Debenture Rights. Any holder of Rights or Debenture Rights, without the consent of the Rights Agent or of the holder of any other Rights or Debenture Rights, may, on such holder's own behalf and for such holder's own benefit and the benefit of other holders of Rights or Debenture Rights, as the case may be, enforce, and may institute and maintain any suit, action or proceeding against the Corporation to enforce such holder's right to exercise such holder's Rights, or Rights to which such holder is entitled, in the manner provided in such holder's Rights or Debenture Rights, as the case may be and in this Agreement. Without limiting the foregoing or any remedies available to the holders of Rights or Debenture Rights, as the case may be, it is specifically acknowledged that the holders of Rights and Debenture Rights would not have an adequate remedy at law for any breach of this Agreement and will be entitled to specific performance of the obligations under, and injunctive relief against actual or threatened violations of the obligations of any Person subject to, this Agreement.

6.7 Regulatory Approvals

Any obligation of the Corporation or action or event contemplated by this Agreement shall be subject to the receipt of any requisite approval or consent from any governmental or regulatory authority, and without limiting the generality of the foregoing, necessary approvals of The Toronto Stock Exchange and other exchanges shall be obtained, such as to the issuance of Common Shares upon the exercise of Rights under Subsection 2.2(d).

6.8 Declaration as to Non-Canadian Holders

If in the opinion of the Board of Directors (who may rely upon the advice of counsel) any action or event contemplated by this Agreement would require compliance by the Corporation with the securities laws or comparable legislation of a jurisdiction outside Canada, the Board of Directors acting in good faith shall take such actions as it may deem appropriate to ensure such compliance. In no event shall the Corporation or the Rights Agent be required to issue or deliver Rights, Debenture Rights or securities issuable on exercise of Rights to persons who are citizens, residents or nationals of any jurisdiction other than Canada or the United States, in which such issue or delivery would be unlawful without registration of the relevant Persons or securities for such purposes.

6.9 Notices

(a) Notices or demands authorized or required by this Agreement to be given or made by the Rights Agent or by the holder of any Rights or Debenture Rights to or on the Corporation shall be sufficiently given or made if delivered, sent by registered or certified mail, postage prepaid (until

another address is filed in writing with the Rights Agent), or sent by facsimile or other form of recorded electronic communication, charges prepaid and confirmed in writing, as follows:

TransCanada PipeLines Limited
TransCanada PipeLines Tower
111 - 5th Avenue S.W.
P.O. Box 1000, Station M
Calgary, Alberta
T2P 4K5

Attention: Corporate Secretary
Telecopy No.: (403) 267-8884

(b) Notices or demands authorized or required by this Agreement to be given or made by the Corporation or by the holder of any Rights or Debenture Rights to or on the Rights Agent shall be sufficiently given or made if delivered, sent by registered or certified mail, postage prepaid (until another address is filed in writing with the Corporation), or sent by facsimile or other form of recorded electronic communication, charges prepaid and confirmed in writing, as follows:

Montreal Trust Company of Canada
411 - 8th Avenue S.W.
Calgary, Alberta
T2P 1E7

Attention: Manager, Corporate Trust Department
Telecopy No.: (403) 267-6598

(c) Notices or demands authorized or required by this Agreement to be given or made by the Corporation or the Rights Agent to or on the holder of any Rights or Debenture Rights shall be sufficiently given or made if delivered or sent by first class mail, postage prepaid, addressed to such holder at the address of such holder as it appears upon the register of the Rights Agent or, prior to the Separation Time, on the register of the Corporation for its Common Shares, Equity Preferred Shares or Convertible Debentures, as the case may be. Any notice which is mailed or sent in the manner herein provided shall be deemed given, whether or not the holder receives the notice.

(d) Any notice given or made in accordance with this Section 6.9 shall be deemed to have been given and to have been received on the day of delivery, if so delivered, on the third Business Day (excluding each day during which there exists any general interruption of postal service due to strike, lockout or other cause) following the mailing thereof, if so mailed, and on the day of telegraphing, telecopying or sending of the same by other means of recorded electronic communication (provided such sending is during the normal business hours of the addressee on a Business Day and if not, on the first Business Day thereafter). Each of the Corporation and the Rights Agent may from time to time change its address for notice by notice to the other given in the manner aforesaid.

6.10 Costs of Enforcement

The Corporation agrees that if the Corporation fails to fulfil any of its obligations pursuant to this Agreement, then the Corporation will reimburse the holder of any Rights or Debenture Rights for the costs and expenses (including legal fees) incurred by such holder to enforce his rights pursuant to any Rights, Debenture Rights or this Agreement.

6.11 Successors

All the covenants and provisions of this Agreement by or for the benefit of the Corporation or the Rights Agent shall bind and enure to the benefit of their respective successors and assigns hereunder.

6.12 Benefits of this Agreement

Nothing in this Agreement shall be construed to give to any Person other than the Corporation, the Rights Agent and the holders of the Rights or Debenture Rights any legal or equitable right, remedy or claim under this Agreement; further, this Agreement shall be for the sole and exclusive benefit of the Corporation, the Rights Agent and the holders of the Rights and the Debenture Rights.

6.13 Governing Law

This Agreement and each Right and Debenture Right issued hereunder shall be deemed to be a contract made under the laws of the Province of Alberta and for all purposes shall be governed by and construed in accordance with the laws of such Province applicable to contracts to be made and performed entirely within such Province.

6.14 Severability

If any term or provision hereof or the application thereof to any circumstance shall, in any jurisdiction and to any extent, be invalid or unenforceable, such term or provision shall be ineffective only as to such jurisdiction and to the extent of such invalidity or unenforceability in such jurisdiction without invalidating or rendering unenforceable or ineffective the remaining terms and provisions hereof in such jurisdiction or the application of such term or provision in any other jurisdiction or to circumstances other than those as to which it is specifically held invalid or unenforceable.

6.15 Effective Date

This Agreement is effective and in full force and effect in accordance with its terms from and after the Effective Date. At the first annual meeting of holders of Voting Shares of the Corporation following the Effective Date, the Corporation shall request confirmation of this Agreement by the holders of its Voting Shares. If this Agreement is not confirmed by a majority of the votes cast by holders of Voting Shares who vote in respect of confirmation of this Agreement at such meeting, then this Agreement and all outstanding Rights shall terminate and be void and of no further force and effect on and from the close of business on the date of termination of such meeting.

6.16 Reconfirmation

Notwithstanding the confirmation of this Agreement pursuant to Section 6.15, the Corporation shall request reconfirmation of this Agreement at a meeting of holders of Voting Shares to be held not earlier than February 1, 2000 and not later than the date on which the 2000 annual meeting of holders of Voting Shares terminates. If the Agreement is not reconfirmed at such meeting by a majority of the votes cast by holders of Voting Shares who vote in respect of the reconfirmation of this Agreement, this Agreement and all outstanding Rights and Debenture Rights shall terminate and be void and of no further force and effect on and from the close of business on that date which is the earlier of the date of termination of the meeting called to consider the reconfirmation of this Agreement and the date of termination of the 2000 annual meeting of holders of Voting Shares; provided, that termination shall not occur if a Flip-in Event has occurred (other than a Flip-in Event which has been waived pursuant to Subsection 6.1(a) or (h) hereof) prior to the date upon which this Agreement would otherwise terminate pursuant to this Section 6.16.

6.17 Determinations and Actions by the Board of Directors

The Board of Directors, upon the advice of outside counsel, shall have the exclusive power and authority to administer this Agreement and to exercise all rights and powers specifically granted to the Board of Directors or the Corporation, or as may be necessary or advisable in the administration of this Agreement, including, without limitation, the right and power to make all determinations deemed necessary or advisable for the administration of this Agreement. All such actions, calculations and determinations (including all omissions

with respect to the foregoing) which are done or made by the Board of Directors, in good faith, shall not subject the Board of Directors or any director of the Corporation to any liability to the holders of the Rights or the Debenture Rights.

6.18 Time of the Essence

Time shall be of the essence in this Agreement.

6.19 Execution in Counterparts

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

TRANSCANADA PIPELINES LIMITED

By: ______________________________
President

By: ______________________________
Corporate Secretary (c/s)

MONTREAL TRUST COMPANY OF CANADA

By: ______________________________

By: ______________________________
(c/s)

ATTACHMENT 1

TRANSCANADA PIPELINES LIMITED
SHAREHOLDER RIGHTS PLAN AGREEMENT

[Form of Rights Certificate]

Certificate No. ______________ Rights ______________

THE RIGHTS ARE SUBJECT TO TERMINATION ON THE TERMS SET FORTH IN THE SHAREHOLDER RIGHTS PLAN AGREEMENT. UNDER CERTAIN CIRCUMSTANCES (SPECIFIED IN SUBSECTION 3.1(b) OF THE SHAREHOLDER RIGHTS PLAN AGREEMENT), RIGHTS BENEFICIALLY OWNED BY AN ACQUIRING PERSON OR CERTAIN RELATED PARTIES, OR TRANSFEREES OF AN ACQUIRING PERSON OR CERTAIN RELATED PARTIES, MAY BECOME VOID.

Rights Certificate

This certifies that ____, or registered assigns, is the registered holder of the number of Rights set forth above, each of which entitles the registered holder thereof, subject to the terms, provisions and conditions of the Shareholder Rights Plan Agreement, dated as of December 2, 1994, as the same may be amended or supplemented from time to time (the "Shareholder Rights Agreement"), between TransCanada PipeLines Limited, a corporation duly incorporated under the *Canada Business Corporations Act* (the "Corporation") and Montreal Trust Company of Canada, a trust company incorporated under the laws of Canada (the "Rights Agent") (which term shall include any successor Rights Agent under the Shareholder Rights Agreement), to purchase from the Corporation at any time after the Separation Time (as such term is defined in the Shareholder Rights Agreement) and prior to the Expiration Time (as such term is defined in the Shareholder Rights Agreement), one fully paid common share of the Corporation (a "Common Share") at the Exercise Price referred to below, upon presentation and surrender of this Rights Certificate with the Form of Election to Exercise (in the form provided hereinafter) duly executed and submitted to the Rights Agent at its principal office in any of the cities of Vancouver, Calgary, Regina, Winnipeg, Toronto and Montreal or to the principal office of The Bank of Montreal Trust Company in New York City, New York. The Exercise Price shall initially be $60 (Cdn.) per Right and shall be subject to adjustment in certain events as provided in the Shareholder Rights Agreement.

This Rights Certificate is subject to all of the terms and provisions of the Shareholder Rights Agreement, which terms and provisions are incorporated herein by reference and made a part hereof and to which Shareholder Rights Agreement reference is hereby made for a full description of the rights, limitations of rights, obligations, duties and immunities thereunder of the Rights Agent, the Corporation and the holders of the Rights Certificates. Copies of the Shareholder Rights Agreement are on file at the registered office of the Corporation.

This Rights Certificate, with or without other Rights Certificates, upon surrender at any of the offices of the Rights Agent designated for such purpose, may be exchanged for another Rights Certificate or Rights Certificates of like tenor and date evidencing an aggregate number of Rights equal to the aggregate number of Rights evidenced by the Rights Certificate or Rights Certificates surrendered. If this Rights Certificate shall be exercised in part, the registered holder shall be entitled to receive, upon surrender hereof, another Rights Certificate or Rights Certificates for the number of whole Rights not exercised.

No holder of this Rights Certificate, as such, shall be entitled to vote or receive dividends or be deemed for any purpose the holder of Common Shares or of any other securities which may at any time be issuable upon the exercise hereof, nor shall anything contained in the Shareholder Rights Agreement or herein be construed to confer upon the holder hereof, as such, any of the Rights of a shareholder of the Corporation or any right to vote for the election of directors or upon any matter submitted to shareholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other

actions affecting shareholders (except as provided in the Shareholder Rights Agreement), or to receive dividends or subscription rights, or otherwise, until the Rights evidenced by this Rights Certificate shall have been exercised as provided in the Shareholder Rights Agreement.

This Rights Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Rights Agent.

WITNESS the facsimile signature of the proper officers of the Corporation and its corporate seal.

Date: ______________________

TRANSCANADA PIPELINES LIMITED

By: ______________________________________
(President)

By: ______________________________________
(Corporate Secretary)

Countersigned:

MONTREAL TRUST COMPANY OF CANADA

By: ______________________________________
Authorized Signature

FORM OF ASSIGNMENT

(To be executed by the registered holder if such holder desires to transfer the Rights Certificate.)

FOR VALUE RECEIVED ______________________________ hereby sells, assigns and transfers unto ______________________________

____

(Please print name and address of transferee.)

the Rights represented by this Rights Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint ______________________________ ,

______________________________ as attorney, to transfer the within Rights on the books of the Corporation, with full power of substitution.

Dated: ____________________

____
Signature

Signature Guaranteed:

(Signature must correspond to name as written upon the face of this Rights Certificate in every particular, without alteration or enlargement or any change whatsoever.)

Signature must be guaranteed by a member firm of a recognized stock exchange in Canada, or a commercial bank or trust company having an office or correspondent in Canada.

CERTIFICATE

(To be completed if true.)

The undersigned party transferring Rights hereunder, hereby represents, for the benefit of all holders of Rights and Common Shares, that the Rights evidenced by this Rights Certificate are not, and, to the knowledge of the undersigned, have never been, Beneficially Owned by an Acquiring Person or an Affiliate or Associate thereof or a Person acting jointly or in concert with an Acquiring Person or an Affiliate or Associate thereof. Capitalized terms shall have the meaning ascribed thereto in the Shareholder Rights Agreement.

____
Signature

(To be attached to each Rights Certificate.)

FORM OF ELECTION TO EXERCISE

(To be exercised by the registered holder if such holder desires to exercise the Rights Certificate.)

TO: ________________________________

The undersigned hereby irrevocably elects to exercise ________________________________ ________________________________ whole Rights represented by the attached Rights Certificate to purchase the Common Shares or other securities, if applicable, issuable upon the exercise of such Rights and requests that certificates for such securities be issued in the name of:

____
(Name)

____
(Address)

____
(City and Province)

____
Social Insurance Number or other taxpayer identification number.

If such number of Rights shall not be all the Rights evidenced by this Rights Certificate, a new Rights Certificate for the balance of such Rights shall be registered in the name of and delivered to:

____
(Name)

____
(Address)

____
(City and Province)

____
Social Insurance Number or other taxpayer identification number.

Dated: ________________ ________________________________
Signature

Signature Guaranteed:

(Signature must correspond to name as written upon the face of this Rights Certificate in every particular, without alteration or enlargement or any change whatsoever.)

Signature must be guaranteed by a member firm of a recognized stock exchange in Canada, or a commercial bank or trust company having an office or correspondent in Canada.

CERTIFICATE

(To be completed if true.)

The undersigned party exercising Rights hereunder, hereby represents, for the benefit of all holders of Rights and Common Shares, that the Rights evidenced by this Rights Certificate are not, and, to the knowledge of the undersigned, have never been, Beneficially Owned by an Acquiring Person or an Affiliate or Associate thereof or a Person acting jointly or in concert with an Acquiring Person or an Affiliate or Associate thereof. Capitalized terms shall have the meaning ascribed thereto in the Shareholder Rights Agreement.

____
Signature

(To be attached to each Rights Certificate.)

NOTICE

In the event the certification set forth above in the Forms of Assignment and Election is not completed, the Corporation will deem the Beneficial Owner of the Rights evidenced by this Rights Certificate to be an Acquiring Person or an Affiliate or Associate thereof. No Rights Certificates shall be issued in exchange for a Rights Certificate owned or deemed to have been owned by an Acquiring Person or an Affiliate or Associate thereof, or by a Person acting jointly or in concert with an Acquiring Person or an Affiliate or Associate thereof.

SCHEDULE "C"

KEY EMPLOYEE STOCK INCENTIVE PLAN (1995)

1. PURPOSE

1.1 The purpose of the Plan is to provide the Company with a share-related mechanism to attract, retain and motivate skilled and experienced employees and to reward such of those employees as may be awarded Options under the Plan by the Committee from time to time for their significant contributions toward the long term goals of the Company and to encourage such employees to acquire Shares as long term investments.

2. DEFINITIONS

2.1 As used herein:

(a) "**Award Date**" means the date on which a particular Option is awarded to an Employee;

(b) "**Board**" means the board of directors of the Company;

(c) "**Committee**" means the Human Resources Committee or such other committee of the Board as may from time to time be designated by the Board to administer the Plan; provided that such committee shall consist of three or more persons who are not at the time they exercise discretion under the Plan eligible, and have not at any time within one year prior thereto been eligible, pursuant to the Plan or any similar plan of the Company or any of its affiliates entitling the participants therein to acquire Shares of the Company or shares of any of its affiliates;

(d) "**Company**" means TransCanada PipeLines Limited and any successor or continuing body corporate resulting from the amalgamation or any other form of corporate reorganization of TransCanada PipeLines Limited;

(e) "**Effective Date**" means January 1, 1995;

(f) "**Employee**" means a key employee of the Company or any of its subsidiaries (including any director holding salaried employment with or an office in the Company or any of its subsidiaries). A company or other entity shall be deemed to be a subsidiary of the Company if a sufficient number of voting securities of the company or entity entitling the holder thereof to elect a majority of the board of directors of such company or entity are owned by: (i) the Company, (ii) a company or entity that is a subsidiary of the Company, or (iii) a company or entity which is directly or indirectly a subsidiary of any company or entity referred to in (i) or (ii). An Employee may include a person about to be employed by the Company or any of its subsidiaries, provided that an award of an Option to any such person shall be conditional upon employment with the Company or the subsidiary becoming effective;

(g) "**Exercise Period**" means the period during which Shares subject to a particular Option may be purchased pursuant to the exercise of such Option and is the period from the various Vesting Dates to and including the Expiry Date applicable to such Option;

(h) "**Exercise Price**" means the price at which Shares subject to a particular Option may be purchased pursuant to the exercise of such Option as determined in accordance with paragraph 8.1;

(i) "**Expiry Date**" means the date after which a particular Option cannot be exercised as determined in accordance with paragraph 7.1;

(j) "**Option**" means an option to acquire Shares awarded to an Employee pursuant to the Plan;

(k) "**Option Holder**" means an Employee or former Employee who holds an unexpired Option which has not been exercised in full or, where applicable, the Personal Representative of such person;

(l) "**Personal Representative**" means:

(i) in the case of a deceased Option Holder, the executor or administrator of the estate of the deceased duly appointed by a court or public authority having jurisdiction to do so; and

(ii) in the case of an Option Holder who for any reason is unable to manage his or her affairs, the person entitled by law to act on behalf of such Option Holder;

(m) "**Plan**" or "**KESIP (1995)**" means the Key Employee Stock Incentive Plan (1995) of the Company as established by resolution of the Board dated February 23, 1995, as amended from time to time;

(n) "**Retirement**" means, with respect to any particular employee, the earlier of: (i) the date on which such employee becomes entitled to receive an early retirement pension under the pension plan of the Company, (ii) the date on which such employee becomes entitled to receive a regular retirement pension or a disability pension under the pension plan of the Company, and (iii) the first day of the month following the month in which such employee attains age 65;

(o) "**Share**" or "**Shares**" mean, as the case may be, one or more common shares in the capital of the Company;

(p) "**Shareholder Rights Plan**" means the Shareholder Rights Plan Agreement dated December 2, 1994 between the Company and Montreal Trust Company of Canada; and

(q) "**Vesting Dates**" means the dates on and after which all or a certain number of Shares subject to a particular Option may be purchased pursuant to the exercise of such Option as determined in accordance with paragraph 7.1.

3. ADMINISTRATION

3.1 The Plan shall be administered by the Committee. The Committee may make, amend and repeal at any time and from time to time such regulations not inconsistent with the Plan as it may deem necessary or advisable for the proper administration and operation of the Plan and such regulations shall form part of the Plan. The Committee may delegate to any director, officer or employee of the Company such administrative duties and powers relating to the Plan as it may see fit.

3.2 The interpretation by the Committee of any of the provisions of the Plan and any determination by it pursuant to the Plan shall be final and conclusive and shall not be subject to any dispute by an Option Holder. No member of the Committee or any person acting pursuant to authority delegated by it hereunder shall be liable for any action or determination in connection with the Plan made or taken in good faith and each member of the Committee and each such person shall be entitled to indemnification with respect to any such action or determination in the manner provided for by the Company.

3.3 The powers of the Committee under this Plan may be exercised severally by either the Committee or the Board.

4. ELIGIBILITY

4.1 Persons eligible to participate in the Plan shall be Employees designated by the Committee.

5. SHARES SUBJECT TO PLAN AND TERM OF PLAN

5.1 The aggregate number of Shares that may be issued pursuant to the exercise of Options awarded under the Plan after the Effective Date shall not exceed 10,000,000 Shares subject to adjustment as provided for in paragraph 11.1. Options may only be awarded under the Plan until December 31, 2004 (subject to earlier termination of the Plan). If any Option expires or otherwise terminates for any reason without having been exercised in full, the number of Shares subject to the unexercised portion of the Option shall again be available for purposes of the Plan.

5.2 The Shares to be issued to Option Holders upon the exercise of Options shall be from the authorized and unissued share capital of the Company.

6. AWARDING OF OPTIONS

6.1 The Committee may from time to time, in its sole discretion, award Options to Employees eligible to participate in the Plan and determine the number of Shares subject to each such Option; provided that,

in accordance with the rules of The Toronto Stock Exchange, the number of Shares that may be reserved for issuance pursuant to Options awarded to any one person shall not exceed 5% of the total number of Shares outstanding.

6.2 Following the awarding of an Option to an Employee, the Committee shall notify the Employee in writing of the award.

6.3 The Employee, concurrently with the notice of such Employee's first award of an Option, shall be provided with two copies of a stock option agreement and the Employee shall, within 10 days of receipt thereof, execute one copy and return it to the Committee.

6.4 Upon the awarding of an Option to an Employee, the Award Date, the number of Shares subject to the Option and the Exercise Price of the Option shall be endorsed upon Schedule A to such Employee's stock option agreement.

6.5 Subject to the provisions of the Plan, the Committee or the Chief Executive Officer of the Company may from time to time approve such amendments as the Committee or the Chief Executive Officer may consider expedient to stock option agreements entered into between the Company and participants and to authorize the execution and delivery of any agreement necessary to give effect to such amendments.

6.6 The award of an Option to an Employee at any time shall neither entitle such Employee to receive, nor preclude such Employee from receiving, a subsequent Option award. The Plan does not give any Option Holder the right to be or to continue to be employed by the Company or any of its subsidiaries. The awarding of an Option to an Employee is a matter to be determined solely in the discretion of the Committee. The Plan shall not in any way fetter, limit, obligate, restrict or constrain the Board with regard to the allotment or issue of any shares in the capital of the Company other than as specifically provided for in the Plan.

7. VESTING DATES AND EXPIRY OF OPTIONS

7.1 Subject to paragraph 7.2:

(a) The Vesting Dates of an Option shall be the dates so fixed by the Committee at the time of the award of the Option and shall, unless otherwise fixed by the Committee, be those five dates one, two, three, four and five years following the Award Date and on each such Vesting Date twenty percent (20%) of the Shares originally subject to the Option, or such other percentage as may be fixed by the Committee at the time of the award of the Option, may be purchased under the Option; and

(b) The Expiry Date of an Option shall be the date, not later than the tenth anniversary of the Award Date of such Option, so fixed by the Committee at the time of the award of the Option and shall, unless otherwise fixed by the Committee, be the tenth anniversary of the Award Date of such Option.

7.2 Notwithstanding paragraph 7.1:

(a) On the death of an Option Holder while an Employee or upon Retirement, the Vesting Dates of any Option then held by such Option Holder which are later than the date of such death or Retirement shall be deemed to be the date of such death or Retirement, as the case may be;

(b) On the termination of employment of an Option Holder by the Company or any of its subsidiaries, the Expiry Date of each Option then held by such Option Holder shall be deemed to be the earlier of: (i) the Expiry Date fixed by the Committee at the time of the award of the Option, and (ii) the date which is one month following the effective date of such termination of employment;

(c) On the termination of employment of an Option Holder other than on death, upon Retirement or by the Company or any of its subsidiaries, the Expiry Date of each Option then held by such Option Holder shall be deemed to be the earlier of: (i) the Expiry Date fixed by the Committee at the time of the award of the Option, and (ii) the date which is six months following the effective date of such termination; and

(d) The Committee may at any time or from time to time, with the agreement of an Option Holder (and subject to obtaining any necessary regulatory approvals), accelerate or extend any Vesting Date and/or the Expiry Date of any Option held by such Option Holder if the Committee, in its sole

discretion, determines that in all the circumstances, such action is warranted and provided that the Expiry Date of any Option shall not be extended beyond the tenth anniversary of the Award Date of such Option.

7.3 Any Option not fully exercised within the Exercise Period shall terminate and become null, void and of no effect as of the day following the Expiry Date.

8. EXERCISE PRICE

8.1 The Exercise Price of an Option shall be determined by the Committee at the time the particular Option is awarded but shall not, in any event, be less than the weighted average trading price of the Shares of the Company for the five consecutive trading days on The Toronto Stock Exchange ending on the trading day immediately preceding the Award Date of the Option.

9. EXERCISE OF OPTIONS

9.1 An Option may only be exercised by the Option Holder. An Option Holder may exercise an Option in whole or in part at any time and from time to time during the Exercise Period applicable thereto, provided that, with respect to the exercise of an Option in part, the Committee may at any time and from time to time fix a minimum number of Shares in respect of which an Option Holder may exercise such Option in part. Upon exercise of an Option, a certified cheque or bank draft payable to the Company in an amount equal to the Exercise Price of the Option multiplied by the number of Shares to be purchased pursuant to the exercise of the Option shall be delivered by the Option Holder to the administrator of the Plan.

9.2 Promptly following the receipt of the certified cheque or bank draft upon exercise of an Option in whole or in part, the Committee shall cause to be delivered to the Option Holder a certificate for the Shares purchased upon such exercise.

10. ASSIGNMENT OF OPTIONS

10.1 Options may not be assigned or transferred. However, the Personal Representative of an Option Holder may exercise the Option within the Exercise Period in accordance with, and to the extent permitted by, paragraph 9.1.

11. ADJUSTMENTS

11.1 If prior to the complete exercise of any Option a stock dividend, other than in lieu of a cash dividend in the ordinary course, is paid on the Shares or if the Shares are consolidated, subdivided, converted, exchanged, reclassified or in any way substituted for (collectively, the "Event"), an Option Holder, upon the exercise of an Option in accordance with its terms, shall be entitled to such number and kind of shares, other securities or property to which such Option Holder would have been entitled as a result of the Event had such Option Holder actually owned the Shares subject to the unexercised portion of the Option at the time of the occurrence of the Event, and the Exercise Price of the Option shall be the same as if the originally optioned Shares of the Company were being purchased hereunder. No fractional Shares shall be issued upon the exercise of Options and accordingly, if as a result of the Event, an Option Holder would become entitled to a fractional share, such Option Holder shall have the right to purchase only the next lowest whole number of shares and no payment or other adjustment will be made with respect to the fractional interest so disregarded. Upon the occurrence of the Event, the number of Shares authorized by the Board for purposes of the Plan as referred to in paragraph 5.1 shall be appropriately adjusted.

11.2 If prior to the complete exercise of any Option a Flip-in Event (as defined in the Shareholder Rights Plan) should occur and the Rights (as defined in the Shareholder Rights Plan) issued thereunder are separated from the Shares and are exercisable on a dilutive basis (unless the Option Holder is a person whose Rights would be voided as a holder of Rights under the Shareholder Rights Plan, in which event no adjustment shall be made to the number of Shares under the Option or the Exercise Price), the Committee shall make appropriate adjustments in the number of Shares under the Option and in the Exercise Price.

11.3 In the case of a proposed merger or amalgamation of the Company with one or more other companies, an offer by any person to purchase all or substantially all of the outstanding Shares of the Company, a sale or distribution of all or substantially all of the Company's assets to any other person or any arrangement or corporate reorganization not otherwise provided for herein, the Committee shall, in a fair and equitable manner, determine the manner in which all unexercised Options granted under the Plan shall be treated.

12. SPECIAL PROVISIONS APPLICABLE TO INCENTIVE STOCK OPTIONS

12.1 Notwithstanding any provisions of the Plan to the contrary, the Committee is authorized to award Options to Employees which constitute "incentive stock options" within the meaning of Section 422 of the *United States Internal Revenue Code of 1986*, as amended.

13. COMPLIANCE WITH LAW

13.1 The awarding of Options and the issuance of Shares on the exercise of Options, the determination of Vesting Dates and Expiry Dates and the terms and conditions of the Plan and Options awarded pursuant thereto is subject to compliance with the laws, rules and regulations of all public agencies and authorities applicable to the Plan and the creation, issuance and distribution of such Options and Shares and to the listing requirements of any stock exchange or exchanges on which the Shares may be listed. An Option Holder shall comply with all such laws, rules and regulations and furnish to the Company any information, report and/or undertakings required to comply with, and to fully cooperate with the Company in complying with, such laws, rules and regulations.

14. CHOICE OF LAW

14.1 The Plan shall be interpreted and construed in accordance with the laws in effect in the Province of Alberta.

15. AMENDMENT

15.1 The Committee may amend or discontinue the Plan at any time, provided, however, that any amendment to the Plan which increases the number of Shares which may be issued under the Plan must be approved by the shareholders of the Company. No amendment, however, shall alter or impair the rights of any Option Holder without the consent of such Option Holder.

The Management Proxy Circular dated March 4, 1994 for the Company's last annual meeting has been filed with the securities commissions or similar authorities in Canada. The Annual Information Form of the Company for the year ended December 31, 1994, expected to be dated March 20, 1995, will be filed prior to March 30, 1995 with securities commissions or similar authorities in Canada, and under cover of Form 40-F with the U.S. Securities and Exchange Commission. The 1994 Management Proxy Circular is available and the Annual Information Form for the year ended December 31, 1994 will be available on or about April 15, 1995 (without charge to holders of common shares of the Company) upon request to the Corporate Secretary and Associate General Counsel, TransCanada PipeLines Limited, P.O. Box 1000, Station "M", Calgary, Alberta T2P 4K5.

Canadian Mail Service Interruption: **If there is a mail service interruption in Canada prior to mailing by a shareholder of a completed proxy to TransCanada's transfer agent, Montreal Trust, it is recommended that the shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of Montreal Trust:**

Alberta
411 - 8th Avenue S.W.
Calgary

10200 - 102nd Avenue
Edmonton

British Columbia
510 Burrard Street
Vancouver

100 - 747 Fort Street
Victoria

Saskatchewan
1778 Scarth Street
Regina

201 Second Avenue S.
Saskatoon

Manitoba
221 Portage Avenue
Winnipeg

Ontario
Commerce Place
21 King Street W.
Hamilton

171 Queens Avenue
London

96 Sparks Street
Ottawa

151 Front Street W.
8th Floor
Toronto

Québec
Place Montréal Trust
1800, avenue McGill College
6th Floor
Montréal

475, rue Saint-Amable
Québec

New Brunswick
53 King Street
Saint John

Nova Scotia
1690 Hollis Street
Halifax

Prince Edward Island
c/o 143 Grafton Street
Charlottetown

Newfoundland
331 Water Street
St. John's

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TransCanada

TransCanada PipeLines Limited

Notice of 1997 Annual Meeting of Shareholders and Management Proxy Circular

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TransCanada

Dear Shareholder:

You are invited to attend the Annual Meeting of the common shareholders of TransCanada PipeLines Limited which will be held at the Palliser Hotel, Calgary, Alberta on Thursday, April 24, 1997 at 10:30 a.m. (local time).

The items of business to be acted on by shareholders are set forth in the notice of meeting and management proxy circular. Your participation in this meeting is very important to the Company, regardless of the number of shares you hold. If you are unable to attend in person, please complete, date, sign and promptly return the enclosed form of proxy in the envelope provided for this purpose. If you intend to be present at the meeting, you may nevertheless find it convenient to express your views in advance by returning the form of proxy duly completed.

Proxies are counted and tabulated by Montreal Trust Company of Canada, the transfer agent of the Company, in such a manner as to preserve the confidentiality of individual shareholder votes, except (a) where the shareholder has made a written comment on the proxy form which is clearly intended for management, (b) as necessary to meet legal requirements or (c) in the event of a proxy contest.

Following the custom of past meetings, we will review with you the business and affairs of the Company and our outlook for the future.

Sincerely yours,

G.J. Maier
Chairman of the Board

March 6, 1997

Your vote is very important. The board of directors urges you to complete, date, sign and return today the enclosed proxy in the enclosed envelope. If your shares are held in the name of a broker or nominee, you must provide voting instructions to the broker or nominee in order for your shares to be represented at the annual meeting. For assistance or further information, please call

TransCanada's Investor Relations Department
toll-free at 1-800-361-6522 or call
Montreal Trust (403) 267-6555

TransCanada

TransCanada PipeLines Tower
111 - Fifth Avenue S.W.
Calgary, Alberta
Canada T2P 3Y6

NOTICE OF ANNUAL MEETING

NOTICE IS HEREBY GIVEN that the Annual Meeting (the "Meeting") of the holders of common shares (the "common shares") of TransCanada PipeLines Limited will be held at the Palliser Hotel, 133 - 9th Avenue S.W., Calgary, Alberta on Thursday, April 24, 1997 at 10:30 a.m. (local time) for the following purposes:

(1) to receive the consolidated financial statements for the year ended December 31, 1996 and the auditors' report thereon;

(2) to elect directors to serve for the ensuing year;

(3) to appoint auditors to hold office; and

(4) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of common shares are invited to attend the Meeting. Shareholders of record at the close of business on March 6, 1997 will be entitled to vote at the Meeting unless a shareholder has transferred shares after that date and the new holder of such shares establishes proper ownership and requests, not later than 10 days before the Meeting, to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to complete, date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting. To be used at the Meeting, proxies must be received before 4:30 p.m. (Calgary time) on Wednesday, April 23, 1997 by the Company's transfer agent, Montreal Trust Company of Canada, Stock Transfer Services, 530 - 8th Avenue S.W., Calgary, Alberta, Canada, T2P 3S8 or be presented at the Meeting.

The 1996 Annual Report, the Management Proxy Circular and a form of proxy accompany this Notice of Meeting.

By Order of the Board of Directors,

Alison T. Love.

Alison T. Love
Corporate Secretary and
Associate General Counsel

Calgary, Alberta
March 6, 1997

TransCanada

MANAGEMENT PROXY CIRCULAR

General Information

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by management of TransCanada PipeLines Limited (the "Company" or "TransCanada") to be used at the annual meeting and at any adjournment or adjournments thereof (the "Meeting") of holders of common shares (the "common shares" or "shares") of the Company to be held in Calgary, Alberta on Thursday, April 24, 1997, at the place and for the purposes set out in the accompanying Notice of Annual Meeting (the "Notice of Meeting").

It is anticipated that copies of this Circular and the form of proxy for shareholders will be first distributed to shareholders on or before March 28, 1997. The cost of soliciting proxies will be borne by the Company. While most proxies will be solicited by mail only, some shareholders may also be contacted by Company employees personally or by telephone. In addition, the Company will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of common shares registered in the names of such brokers, custodians, nominees and fiduciaries.

Unless otherwise stated, the information contained in this Circular is given as of March 6, 1997 and all dollar amounts set forth herein are in Canadian dollars.

Record Date for Notice of Meeting and Provisions Relating to Voting

The Board of Directors of the Company has fixed March 6, 1997 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share shown as registered in such holder's name on the list of shareholders prepared as of the close of business on the record date, unless a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership and requests the Corporate Secretary of the Company, not later than the close of business on April 14, 1997, to include such holder's name on the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 530 - 8th Avenue S.W., Calgary, Alberta, T2P 3S8 and will be available for inspection at the Meeting.

Appointment of Proxy Holders

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 4:30 p.m. (Calgary time) on April 23, 1997, or must present a properly executed proxy at the Meeting. All shares represented by a properly executed proxy will be voted or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted "For" the election of the persons nominated for election as directors and "For" the appointment of KPMG, Chartered Accountants, as auditors.

The enclosed form of proxy, when properly signed, confers discretionary authority on the person or persons named to vote on any amendment to matters identified in the Notice of Meeting and on any other matter

properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted at the discretion of the person or persons named therein. The persons named in the form of proxy are officers of the Company.

Revocability of Proxies

A shareholder may revoke a proxy by depositing an instrument in writing executed by such shareholder or such shareholder's attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of the Company, 111 - 5th Avenue S.W., Calgary, Alberta, T2P 3Y6, at any time up to and including the last business day preceding the day of the Meeting, or with the Chairman of the Meeting on the day of the Meeting.

Voting Shares and Principal Shareholders

The number of outstanding common shares entitled to be voted at the Meeting is 218,821,689. Each common share carries one vote and such shares are the only class of the Company's shares entitled to be voted at the Meeting.

To the knowledge of the directors and officers of the Company, based on information at March 6, 1997, no individual or corporation beneficially owned, directly or indirectly, or exercised control over, more than 5% of the outstanding common shares of the Company.

Business to be Transacted at the Meeting

1. Financial Statements

The consolidated financial statements of the Company for the year ended December 31, 1996 and the report of the auditors thereon will be placed before the Meeting. Additional copies of the Annual Report (which contains the consolidated financial statements), in English or French, may be obtained from the Corporate Secretary of the Company upon request, and will be available at the Meeting.

2. Election of Directors

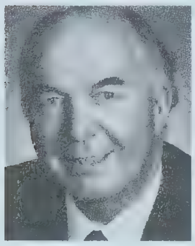
The Board of Directors has determined that the number of persons constituting the Board shall be 13. All of the nominees whose names are set forth below are currently directors of the Company. The Governance Committee of the Board of Directors reviews annually the qualification of persons proposed for election to the Board of Directors and submits its recommendations to the Board for consideration. The persons nominated below are, in the opinion of the Board of Directors, and in the opinion of management, well qualified to act as directors for the ensuing year. Each nominee has established his or her eligibility and willingness to serve as a director if elected. The persons named in the form of proxy are officers of the Company and intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the form of proxy to withhold such vote. If, prior to the Meeting, any of the listed nominees becomes unable or unwilling to serve, the persons named in the form of proxy will have the right to use their discretion in voting for a properly qualified substitute. Each director elected will hold office until the next annual meeting or until his or her successor is duly elected or appointed.

Information Concerning the Directors

General Information

Set forth below are the names of the 13 nominees, their municipalities of residence, all positions and offices held by them with the Company and its significant affiliates, their principal occupations or employment during the past five years, the year from which each director has continually served as a director of the Company, the number of shares of the Company owned by each of them or over which they exercise control or direction and a summary of the record of attendance by directors at meetings of the Board and its committees during 1996:

				Number of Meetings Attended	
Proposed Nominee[1]	**Principal Occupation**	**Director Since**	**Common Shares owned, controlled or directed[2]**	**Board**	**Committees**
 Robert Emmet Dineen, Jr. New York, New York	Partner of Shearman & Sterling, Attorneys-at-Law, New York, New York.	April 1989	3,098	10/11	6/6
 Wendy Dobson Ashburn, Ontario	Professor, Faculty of Management and Director, Centre for International Business, University of Toronto, Toronto, Ontario.	April 1992	500	11/11	9/9
 Louis Yves Fortier, C.C., Q.C. Montréal, Québec	Chairman and a senior partner of Ogilvy Renault, Barristers and Solicitors, Montréal, Québec. Prior to January 1992 Mr. Fortier was Canada's Ambassador and Permanent Representative to the United Nations in New York.	April 1992	1,500	9/11	7/9

Proposed Nominee[1]	Principal Occupation	Director Since	Common Shares owned, controlled or directed[2]	Number of Meetings Attended	
				Board	Committees
 Kerry L. Hawkins Winnipeg, Manitoba	President of Cargill Limited, Winnipeg, Manitoba (grain handlers and merchants, transporters and processors of agricultural products).	April 1996	1,000	7/8	4/4
 Thomas Edward Kierans Toronto, Ontario	President and Chief Executive Officer of the C.D. Howe Institute, Toronto, Ontario (independent, non-profit research and educational institution).	April 1990	5,389	10/11	10/11
 The Hon. Donald Stovel Macdonald, P.C., C.C. Toronto, Ontario	Counsel to McCarthy Tétrault, Barristers and Solicitors, Toronto, Ontario.	October 1991	505	11/11	12/12
 Gerald James Maier Calgary, Alberta	Chairman of the Company. Prior to April 1994 Mr. Maier was Chairman and Chief Executive Officer of the Company, prior to April 1993 he was Chairman, President and Chief Executive Officer of the Company and prior to February 1992 he was President and Chief Executive Officer of the Company.	December 1983	523,541[3]	11/11	9/9

Proposed Nominee[1]	Principal Occupation	Director Since	Common Shares owned, controlled or directed[2]	Number of Meetings Attended	
				Board	Committees
 James Robert Paul Houston, Texas	Chairman, Worldwide Cellular Inc. (portable cellular phone rental services) Houston, Texas. Prior to 1994 Mr. Paul was President and Chief Executive Officer of The Coastal Corporation.	April 1996	2,000	7/8	4/4
 Harry George Schaefer Calgary, Alberta	President of H.G. Schaefer & Associates (business advisory service company), Calgary, Alberta. Prior to May 1996 Mr. Schaefer was Chairman of the Board of TransAlta Utilities Corporation (generation and sale of electric energy). Prior to May 1993 Mr. Schaefer was also Chief Financial Officer of TransAlta Utilities.	April 1987	10,012[4]	11/11	13/13
 Allan Richard Taylor North York, Ontario	Director of Royal Bank of Canada ("Royal Bank") Toronto, Ontario (Canadian chartered bank). Prior to January 1995 Mr. Taylor was Chairman of Royal Bank and prior to November 1994 he was Chairman and Chief Executive Officer of Royal Bank.	December 1983	1,200	10/11	13/13
 Joseph Dale Thompson Edmonton, Alberta	Chairman, President and Chief Executive Officer of PCL Construction Group Inc., Edmonton, Alberta ("PCL") (general construction contractors). Prior to October 1993 Mr. Thompson was Vice-Chairman, President and Chief Executive Officer and prior to May 1991 he was Vice-Chairman and Chief Operating Officer of PCL.	April 1995	3,610[5]	10/11	6/6

Proposed Nominee[1]	Principal Occupation	Director Since	Common Shares owned, controlled or directed[2]	Number of Meetings Attended: Board	Number of Meetings Attended: Committees
 George William Watson Calgary, Alberta	President and Chief Executive Officer of the Company. Prior to April 1994 Mr. Watson was President of the Company and prior to April 1993 he was Chief Financial Officer of the Company.	August 1993	134,730[6]	10/10	3/3
 Margaret Kent Witte Kirkland, Washington	Chairman, President and Chief Executive Officer of Royal Oak Mines, Inc., Kirkland, Washington (mining company).	April 1995	600[7]	11/11	4/6

Notes:

(1) *All nominees are Canadian residents, with the exception of Mr. Dineen, Jr. , Mr. Paul and Ms. Witte who are United States residents. The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by each of the nominees. Except as indicated in the Notes below, the nominees have sole voting and dispositive power with respect to the securities listed above.*

(2) *As to each class of shares of TransCanada, the percentage of outstanding shares beneficially owned by any one director or nominee or by all directors and officers of the Company as a group (of which there are 43) does not exceed 1% of the class so owned.*

(3) *The shares listed include 183,541 shares owned directly by Mr. Maier, 39,000 shares acquired pursuant to the share purchase feature of KESIP (defined below), 283,000 shares as to which Mr. Maier has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP and 18,000 shares held by a privately owned company controlled by Mr. Maier. KESIP is defined and described under "Information Concerning the Compensation of Directors and Officers".*

(4) *The shares listed include 4,000 shares held by a company controlled by Mr. Schaefer's mother and 512 shares held by Mr. Schaefer's wife. Mr. Schaefer disclaims beneficial ownership of such shares.*

(5) *The shares listed are held by a family trust, the beneficial owners of which are children of Mr. Thompson and Mr. Thompson's wife. Mr. Thompson disclaims beneficial ownership of such shares.*

(6) *The shares listed include 26,632 shares owned directly by Mr. Watson and 108,098 shares as to which Mr. Watson has the right to acquire beneficial ownership through the exercise of stock options granted under the stock option feature of KESIP.*

(7) *The shares listed include 500 shares owned directly by Ms. Witte and 100 shares owned indirectly as co-trustee of a family estate.*

Information Concerning the Compensation of Directors and Officers

Compensation of Directors

For the financial year ended December 31, 1996, the Company paid each director who was not an employee of the Company as follows: an annual retainer fee of $17,000; an annual fee of $2,700 for each Committee of the Board of Directors of which he or she was a member; and an additional fee of $2,500 for each Committee of the Board of Directors of which he or she was Chairman. The Company also paid each such director a fee of $1,200 for attendance at each meeting or adjourned meeting of the Board of Directors or a

Committee thereof, a travel fee of $1,000 for travelling to meetings where round-trip travel time to meetings exceeded three hours, and reimbursed the director for out-of-pocket expenses incurred in attending such meetings. The Directors who are U.S. residents were paid in U.S. dollars. Directors who are also employees of the Company were not paid directors' fees. The Chairman of the Board was paid $200,000 as a retainer fee, in respect of his duties as Chairman.

Compensation of Officers

Description of Plans

A) **Key Employee Stock Incentive Plan**

In 1979 the Company established the Key Employee Stock Incentive Plan ("KESIP"). Prior to 1995, KESIP included both a stock option feature and a share purchase feature. In April 1995, shareholders of the Company approved certain amendments to KESIP, including the discontinuation of the share purchase feature of the plan, and the extension of such a plan to December 31, 2004.

The amended and restated plan is now called the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)"). All officers of the Company are members of KESIP (1995). Directors who are not employees of the Company are not eligible to participate in KESIP (1995). The maximum number of additional common shares approved by the shareholders in 1995 for issuance under KESIP (1995) was 10,000,000. Under KESIP and KESIP (1995) approximately 3,928,000 common shares were issuable under unexpired options as at December 31, 1996.

KESIP (1995) is administered by the Human Resources Committee of the Board of Directors. The exercise prices are determined by the Human Resources Committee at the time the options are awarded and are the weighted average closing prices of the common shares of the Company on The Toronto Stock Exchange on the five trading days immediately preceding the award dates.

Twenty percent of the common shares subject to an option are eligible for purchase upon each of the first five anniversary dates following the award date of the option. At the time of awarding an option, the expiry date (the last day on which the option is exercisable, generally 10 years from the date on which it was granted) is established.

B) **Performance Unit Plan**

In 1995 the Company established a Performance Unit Plan ("PUP"), which is administered by the Human Resources Committee of the Board of Directors. The purpose of PUP is to provide an incentive to the Company's senior management to focus, in their decision making and business strategies, on factors that will enhance the capital appreciation of the common shareholders' investment in the Company and to maximize the Company's current earnings thereby enabling common share dividends to be paid by the Company to the maximum extent possible. Officers or directors holding salaried employment with the Company or any of its subsidiaries were eligible to participate in PUP in 1996. As at December 31, 1996, 1,888,951 units under PUP were outstanding.

Under PUP, a unit shall accrue annually a cash amount equal to the dividends paid on a common share in a financial year, provided the Company's total shareholder return is equal to or greater than that of the peer group index for such financial year, or if the Company's total shareholder return is less than that of the peer group index for such year, such lesser amount, if any, as may be determined by the Human Resources Committee in its absolute discretion. The actual amount accrued on a unit during a financial year may nevertheless not exceed the dividends paid on one common share during such financial year.

A unit may be exercised for the amount accrued on the unit at any time during the period which begins on the fifth anniversary of the award date and shall be deemed to be exercised automatically on the tenth anniversary of the award date. However, at the time of exercise the market price of a common share plus the amount accrued on the unit must be equal to or greater than the market price of a common share on the award date of the unit, and a KESIP (1995) option, if any, awarded on the same date as the unit, must have been previously exercised.

C) **Incentive Compensation Program**

In 1987 the Company adopted an Incentive Compensation Program ("ICP") whereby officers and senior management employees of the Company and its subsidiaries are eligible to receive annual cash awards in lieu of a certain portion of salary. The cash awards are determined during the first quarter of the financial year following the financial year to which the awards relate. The awards can range from nil to preset limits thus placing a portion of the compensation at risk each year. The intention of the plan is to link closely participants' overall cash compensation to the performance of the Company and its business units as well as to their respective individual performance. By doing so, officers and senior management are encouraged to work towards the attainment of overall Company and business unit goals. Eligibility for participation in and the criteria used to determine amounts payable under the ICP for officers are determined by the Human Resources Committee.

D) **Employee Savings Plan**

The Employee Savings Plan ("ESP") was introduced by the Company in 1979 to provide all employees of the Company with a means to participate in the profit performance of the Company. Officers participate in this plan on the same basis as all other TransCanada employees. Under a flexible benefit plan established in 1993, each employee is entitled to a contribution by the Company of an amount equal to 3% of that employee's salary for the purchase of common shares. Additional amounts of up to an approximate average of 3.5% of the employee's salary may be contributed by the Company depending on the employee's desired use of flexible benefit credits. The shares and the dividends thereon are allocated to the employees' accounts once a year. The vesting of the shares allocated under the ESP depends on the number of credited years service an employee has with the Company. After five years credited service all shares allocated to an employee are vested.

Summary Compensation Table

The following table provides a summary of the remuneration earned by the Chief Executive Officer and the four other most highly compensated policy-making executive officers of TransCanada (collectively, the "Named Executive Officers") for services rendered in all capacities during the financial years ended December 31, 1996, 1995 and 1994. Specific aspects of this compensation are dealt with in further detail in the following tables.

Name and Principal Position of the Named Executive Officers	Annual Compensation				Long Term Compensation		All Other Compensation[d] $
					Awards		
	Year	Salary $	Bonus[a] $	Other Annual Compensation[b] $	Securities Under Options Granted[c] (#)	LTIP Payouts $	
G.W. Watson President and Chief Executive Officer	1996 1995 1994	560,000 500,000 441,389	450,000 175,000 130,000	63,783 56,588 45,799	50,000 94,992 45,100	0 0 0	39,404 52,004 48,935
S.J.J. Letwin[e] President, TransCanada Energy USA Inc.	1996 1995 1994	221,550 83,657 0	210,000 25,000 0	25,130 1,582 0	21,600 18,200 0	0 0 0	0 0 0
R.A.M. Young Senior Vice-President, Law	1996 1995 1994	259,000 254,000 244,000	170,000 80,000 75,000	27,650 27,879 25,870	21,600 29,121 16,900	0 0 0	11,800 22,800 20,125
G.L. Spackman[f] President, Gas Marketing Group, TransCanada Energy Ltd.	1996 1995 1994	200,000 175,000 28,472	200,000 80,000 15,000	5,585 0 0	21,600 26,846 10,100	0 0 0	0 0 0
R.J. Reid Senior Vice-President	1996 1995 1994	235,000 213,000 235,532	165,000 100,000 60,000	18,763 34,763 30,721	21,600 31,335 14,200	0 0 0	7,200 6,000 4,500

Notes:

(a) *Amounts referred to in this table as "Bonus" are paid pursuant to the Company's ICP (described above under "Description of Plans — Incentive Compensation Program"). These amounts were paid in cash in the year following the year in which they were earned.*

(b) *Perquisites and other personal benefits do not exceed the lesser of $50,000 and 10% of the total of the annual salary and bonus for any of the Named Executive Officers. The amounts in this column include the value of salary paid in lieu of vacation, the imputed interest benefit from loans made pursuant to a share purchase feature formerly contained in KESIP (described above under "Description of Plans — Key Employee Stock Incentive Plan" and below under "Indebtedness of Directors, Executive Officers and Senior Officers Under Securities Purchase Programs"), and TransCanada's contributions under ESP (described above under "Description of Plans — Employee Savings Plan").*

(c) *The amounts in this column reflect the number of stock options granted to each of the Named Executive Officers in each of the years referred to. A similar number of performance units were granted in 1996 and 1995 under PUP (described above under "Description of Plans — Performance Unit Plan").*

(d) *The amounts in this column include amounts paid to the Named Executive Officers in 1996 by subsidiaries and affiliates of TransCanada (including directors' fees paid by affiliates and amounts paid for serving on management committees of partnerships in which TransCanada holds an interest).*

(e) *Mr. Letwin was appointed as an officer of a subsidiary of the Company in October, 1995.*

(f) *Mr. Spackman was appointed as an officer of a subsidiary of the Company in October, 1994.*

Long-Term Incentive Plans — Awards in 1996

The following table sets forth information regarding long-term incentive plan awards made to the Named Executive Officers during the financial year ended December 31, 1996. See "Description of Plans — Performance Unit Plan" for information with respect to this plan.

Name	Securities, Units or Other Rights (#)[(a)]	Performance or Other Period Until Maturation or Payout[(b)]	Estimated Future Payouts Under Non-Securities Price-Based Plans		
			Threshold (#)	Target (#)	Maximum ($)
G.W. Watson	50,000	December 5, 2006	N/A	N/A	N/A
	30,992	July 31, 2005	N/A	N/A	64,463
	64,000	December 6, 2005	N/A	N/A	69,120
S.J.J. Letwin	21,600	December 5, 2006	N/A	N/A	N/A
	18,200	December 6, 2005	N/A	N/A	19,656
R.A.M. Young	21,600	December 5, 2006	N/A	N/A	N/A
	12,421	July 31, 2005	N/A	N/A	25,836
	16,700	December 6, 2005	N/A	N/A	18,036
G.L. Spackman	21,600	December 5, 2006	N/A	N/A	N/A
	8,646	July 31, 2005	N/A	N/A	17,984
	18,200	December 6, 2005	N/A	N/A	19,656
R.J. Reid	21,600	December 5, 2006	N/A	N/A	N/A
	10,435	July 31, 2005	N/A	N/A	21,705
	20,900	December 6, 2005	N/A	N/A	22,572

Notes:

(a) *On December 5, 1996 one award of PUPs was made to each Named Executive Officer. Those awards are referred to in the first line for each Named Executive Officer. No amount has yet been accrued in respect of the December 1996 awards. The Human Resources Committee determined in February 1997 that $1.08 accrued, for the 1996 fiscal year, in respect of the awards made in 1995, which awards are referred to in the second and third lines for each Named Executive Officer. The amounts referred to herein have not and may never be received by the Named Executive Officers. (See "Description of Plans — Performance Unit Plan").*

(b) *The exercise period for these units begins on the fifth anniversary of the award date and ends on the tenth anniversary of such a date.*

Options Granted During the Most Recently Completed Financial Year[(a)]

The following table sets forth the grants under KESIP (1995), during the financial year ended December 31, 1996, to each of the Named Executive Officers. See "Description of Plans — Key Employee Stock Incentive Plan" for information with respect to this plan.

Name	Number of Common Shares Under Options Granted[(a)]	% of Total Options Granted to Employees in 1996	Exercise Price ($/share)[(b)]	Market Value of Shares Underlying Options on the Date of Grant ($/share)	Expiration Date
G.W. Watson	50,000	4.99%	24.100	23.500	December 5, 2006
S.J.J. Letwin	21,600	2.16%	24.100	23.500	December 5, 2006
R.A.M. Young	21,600	2.16%	24.100	23.500	December 5, 2006
G.L. Spackman	21,600	2.16%	24.100	23.500	December 5, 2006
R.J. Reid	21,600	2.16%	24.100	23.500	December 5, 2006

Notes:

(a) *Twenty percent of the shares under option are purchasable on and after each of the first five anniversary dates of the granting of the option.*

(b) *The exercise price is equal to the weighted average closing price of TransCanada's common shares on The Toronto Stock Exchange on the five trading days immediately prior to the grant of the options.*

Aggregated Option Exercises During 1996 Financial Year and 1996 Financial Year-End Option Values

The following table summarizes, for each of the Named Executive Officers, the number of stock options, if any, exercised during the financial year ended December 31, 1996, the aggregate value realized upon exercise and the total number of unexercised options, if any, held at December 31, 1996. The value realized on exercise is the difference between the closing price of the underlying common shares on the exercise date and the exercise price of the option. The value of unexercised "in-the-money" options at the financial year end is the difference between the exercise price and the closing price of TransCanada's common shares on The Toronto Stock Exchange on December 31, 1996 which was $24.00 per share. These amounts, unlike the amounts shown in the column "Aggregate Value Realized", have not been and may never be realized. The underlying options have not been and will not necessarily be exercised and the actual gains, if any, on exercise will depend on the value of TransCanada's common shares on the date of exercise.

Name	Shares Acquired on Exercise (#)	Aggregate Value Realized ($)	Unexercised Options at December 31, 1996 (#)		Value of Unexercised in-the-Money Options at December 31, 1996 ($)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
G.W. Watson	0	0	108,098	167,694	664,865	668,583
S.J.J. Letwin	0	0	3,640	36,160	20,184	80,735
R.A.M. Young	0	0	69,784	63,737	438,445	238,792
G.L. Spackman	0	0	9,409	49,137	56,631	159,618
R.J. Reid	0	0	61,867	62,568	407,895	231,396

Indebtedness of Directors, Executive Officers and Senior Officers Under Securities Purchase Programs

As at March 6, 1997, the aggregate amount of indebtedness to TransCanada incurred in connection with the purchase of securities of TransCanada by all directors, officers, employees and former directors, officers and employees of TransCanada or any of its subsidiaries amounted to $2,809,972.

The following table sets forth the indebtedness incurred by directors, executive officers and senior officers for the purchase of securities of TransCanada.

Name and Principal Position	Involvement of Issuer or Subsidiary	Largest Amount Outstanding During the Financial Year Ended Dec. 31, 1996[a] $	Amount Outstanding as at Mar. 6, 1997 $	Financially Assisted Securities Purchases During Year Ended Dec. 31, 1996 #	Security for Indebtedness[b]
G.J. Maier Chairman	TransCanada as Lender	788,055	272,828	NIL	TransCanada 39,000
R.J. Reid Senior Vice-President	TransCanada as Lender	165,109	71,572	NIL	TransCanada 7,700 Talisman 256
G.J. Couper Senior Vice-President and Chief Technical Officer	TransCanada as Lender	12,678	7,603	NIL	Talisman 130
R.B. Hodgins Senior Vice-President and Chief Financial Officer	TransCanada as Lender	18,610	16,099	NIL	TransCanada 1,120 Talisman 112
R.T. Smith Senior Vice President, Human Resources and Administration	TransCanada as Lender	9,589	0	NIL	
W.E. Lunt Senior Vice-President, Associated Pipelines and Chemicals	TransCanada as Lender	46,040	16,353	NIL	TransCanada 1,850 Talisman 83

Notes:

(a) *The securities in respect of which the above indebtedness was incurred, were purchased during the years 1985 to 1987 and were common shares of TransCanada, pursuant to the terms of the share purchase feature of KESIP which no longer exists. The loans are interest-free.*

(b) *During the period in which the loan is unpaid, the shares are held as security for the payment of the loan. This column reflects the aggregate number of common shares held as security for the loan amount as at March 6, 1997. In 1989, pursuant to a Plan of Arrangement, the shares of Encor Inc. ("Encor"), formerly a subsidiary of the Company, were distributed to the shareholders of the Company and accordingly certain KESIP participants owned both TransCanada and Encor shares. In 1993, pursuant to another Plan of Arrangement, the shares of Encor were acquired by Talisman Energy Inc. ("Talisman") and the companies were amalgamated. As a result, some KESIP participants own both TransCanada and Talisman shares which are held in trust as security for the loans.*

Pension and Retirement Benefits

The Named Executive Officers and all other employees participate in the Company's non-contributory defined benefit pension plan (the "Pension Plan"). Annual Pension Plan benefits are integrated with Canada Pension Plan benefits and are based on between 1.25% and 1.75% of a person's final average plan earnings times the total number of years in the Pension Plan ("Credited Pensionable Service"). Final average plan earnings are defined as the average annual earnings during the 36 consecutive months when earnings were highest. The Pension Plan benefits are subject to a ceiling imposed by the Income Tax Act of $1,722 per year for each year of Credited Pensionable Service.

Under a Supplemental Retirement Benefit Plan ("SRP") which was amended in 1994 and in 1996, certain employees of the Company are entitled to supplementary pension benefits. In respect of credited service prior to May 1990, the annual pension benefit is equal to 3.33% of final average plan earnings for each of the first 15 years of service with the Company and 2% for each of the next 10 years. These pension benefits are inclusive of benefits payable under the Pension Plan and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to those employees with credited service granted prior to May 1990 under the SRP is 70% of final average plan earnings at the date of retirement, less the amount payable under the Canada Pension Plan. In respect of credited service on and after May 1990, the annual pension benefit is equal to the amount calculated using the formula contained in the Pension Plan without reference to the ceiling imposed by the Income Tax Act referred to above.

Under both the Pension Plan and SRP, a participant will receive the following automatic form of pension:

(a) in respect of credited service prior to January 1, 1990, upon retirement, a monthly pension payable for life with 60% continuing to the participant's surviving spouse; and

(b) in respect of credited service on and after January 1, 1990, upon retirement, a monthly pension as described in (a) above, and for unmarried participants or married participants who have so elected and with spousal consent have waived the automatic form of pension, a monthly pension payable for life with payments to the participant's estate guaranteed for the balance of 10 years if the participant dies within 10 years of retirement.

In lieu of the automatic form of pension, a participant may elect optional forms of pension payment.

Assuming that the executive officers named below remain employed by the Company until age 65 and that the Pension Plan and the SRP remain in force substantially in their present forms, such officers will have approximately the following listed number of years of Credited Pensionable Service: G.W. Watson — 22 years; S.J.J. Letwin — 25 years; G.L. Spackman — 20 years; R.A.M. Young — 14 years; and R.J. Reid — 40 years.

The following table sets out estimated annual pension benefits (based on the "joint and 60% survivor" method) payable for credited service under the Pension Plan and the SRP (excluding amounts payable under the Canada Pension Plan) in specified final average plan earnings and years of Credited Pensionable Service classifications:

Final Average Plan Earnings	Years of Credited Pensionable Service					
	15	20	25	30	35	40
$ 200,000	$ 50,000	$ 66,000	$ 83,000	$100,000	$116,000	$133,000
300,000	76,000	101,000	127,000	152,000	177,000	203,000
400,000	102,000	136,000	171,000	205,000	239,000	273,000
500,000	129,000	171,000	214,000	257,000	300,000	343,000
600,000	155,000	206,000	258,000	310,000	361,000	413,000
700,000	181,000	241,000	302,000	362,000	422,000	483,000
800,000	207,000	276,000	346,000	415,000	484,000	553,000
900,000	234,000	311,000	389,000	467,000	545,000	623,000
1,000,000	260,000	346,000	433,000	520,000	606,000	693,000

Note: *Final average plan earnings include base salary and targeted incentive payments under the ICP.*

Report on Executive Compensation by the Human Resources Committee of the Board of Directors

The Human Resources Committee of the Board of Directors (the "Committee") is composed of five directors who are neither officers nor former officers of the Company. The Committee is charged with the mandate described on page 76 of the 1996 Annual Report. Certain of its responsibilities are also set out in Schedule "A" of this Circular. The Committee reports to the Board of Directors (the "Board") all material matters considered and approved by it.

When determining the level of executive compensation, the Committee utilizes data prepared by independent compensation consultants. Competitive compensation data for a comparator group comprised of approximately 25 large Canadian public companies is referenced. These companies are of similar size and complexity to the Company and are representative of the types of organizations with which the Company must compete for its executive officers.

The main objectives of the compensation program for the executive officers of the Company are:

- To attract, retain and appropriately motivate the highly qualified workforce necessary to achieve the Company's annual and longer-term business objectives; and
- To reinforce the commitment of the executive officers to maximize shareholder value.

In order to achieve these objectives, the total compensation program for executive officers has four components, all of which are performance-based:

- Base salary;
- An annual incentive program in the form of cash payments, described above under "Description of Plans — Incentive Compensation Program";
- A long-term equity-based incentive plan, described above under "Description of Plans — Key Employee Stock Incentive Plan"; and
- A long-term, equity-related cash incentive plan, described above under "Description of Plans — Performance Unit Plan".

When determining how the Company's compensation program compares against the competitive compensation data, the Committee considers it appropriate that considerable emphasis should be placed on actual performance achievements as measured against pre-established corporate and business unit goals, as well as individual executive officer performance management objectives.

Base Salaries

Executive officers are paid base salaries which are administered within salary ranges established for each position. Due to the fact that executive officers participate in the Company's annual Incentive Compensation Program (the "ICP"), their salaries are not permitted to exceed the mid-point of their salary range. Only when a superior level of performance is achieved under the ICP does total cash compensation, including payments under the ICP, reach the top 25% of the comparator group of companies. If a less than superior level of performance is achieved under the ICP, total cash compensation will be lower.

ICP

The ICP links the annual cash compensation levels and the achievements of annual individual, corporate and business unit performance goals by placing a portion of overall cash compensation at risk, to be obtained only if goals are achieved. The payments at risk under the ICP typically represent up to approximately 30% to 40% of the cash compensation (base salary plus ICP) opportunity at the executive officer level. The individual, corporate and business unit goals are determined annually in conjunction with the Board's approval of the Company's strategic and operating plans. Quantitative goals include such factors as total shareholder return, return on assets, net income per common share, and net income. Qualitative goals include developing strategic business plans which will result in future corporate growth and increased shareholder value, and improving overall operational performance on matters such as

reliability, quality of service to customers, safety, environmental compliance, and human resource development to achieve continuous quality and productivity improvement.

Awards under the ICP are payable when the pre-identified individual and corporate performance achievements are judged to have been met at the target level, which is pre-determined by the Committee. If performance exceeds the target level and is judged to be superior, the ICP allows for higher incentive payments. In 1996, awards to executive officers as a group reflected the fact that the Company was considered to have exceeded its performance targets at a level judged to have been superior.

Key Employee Stock Incentive Plan

The Company's long-term incentive plan, the Key Employee Stock Incentive Plan (1995) ("KESIP (1995)"), is the third performance-based component of the executive group's total compensation program. KESIP (1995) is intended to reinforce executive officer commitment to the long-term growth in profitability and shareholder value by including stock options in the total compensation program. Unexercised options held by individuals at the time new awards are made to those individuals are not considered; limits are placed on the total shares that can be reserved for issuance under KESIP (1995). The size of the annual stock option awards to individual officers is determined by considering individual performance, level of responsibility, authority and overall importance to the current welfare of the Company, and the degree to which their long-term potential and contribution will be key to the long-term success of the Company. In the case of stock options, executives benefit only if the market value of the stock subject to the option at the time of exercise is greater than that at the time of the award.

Performance Unit Plan

In order to further strengthen the alignment of the executive group's financial interests with those of the shareholders, the Board approved the adoption of a new Performance Unit Plan ("PUP"), effective in 1995. On the same date as the Committee determines the number of stock options to be awarded under the terms of KESIP (1995), it also may determine an equivalent number of units be granted under PUP. Each unit has the potential to accrue annually a cash amount equal to the dividends paid on a common share in a financial year. The purpose of PUP is to tie a portion of executive compensation to the Company's performance in relation to both share price and dividend payments.

Total Compensation

If the corporate and individual executive officer performance targets are met, and assuming stock growth and dividend payment assumptions are correct for the KESIP (1995) and PUP components, it is intended that an average 67% of the total executive officer compensation program relate to the base salary component, 11% to the annual ICP, and 22% to the long-term KESIP (1995) and PUP programs. The more senior the executive officer, the more closely compensation is tied to the actual performance of the Company. Accordingly, a higher proportion of the total compensation package is at risk under the ICP, KESIP (1995) and PUP programs for the Named Executive Officers.

Compensation of the Chief Executive Officer

Mr. Watson's compensation program has the same components as those described for the other members of the executive officer group: base salary, the annual ICP and the long-term KESIP (1995) and PUP programs. Mr. Watson's compensation is established with reference to the same comparator group described above. The Committee makes recommendations to the Board regarding Mr. Watson's compensation on the same performance-related basis as for the other executive officers. In comparison to the other executive officers, when determining Mr. Watson's compensation greater emphasis is placed on the performance of the Company as measured against the pre-established quantitative and qualitative goals. No specific weighting is assigned to these goals when recommending a base salary, KESIP (1995) award and PUP award for Mr. Watson. Under the ICP, 90% of his award is directly related to the quantitative and qualitative corporate achievements and 10% to his individual achievements. In 1996, Mr. Watson's annual base salary was set at $560,000. In recognition of his contribution to the Company's superior performance in 1996, in February 1997 an ICP payment in respect of 1996 of $450,000 was approved. In addition, in 1996 an

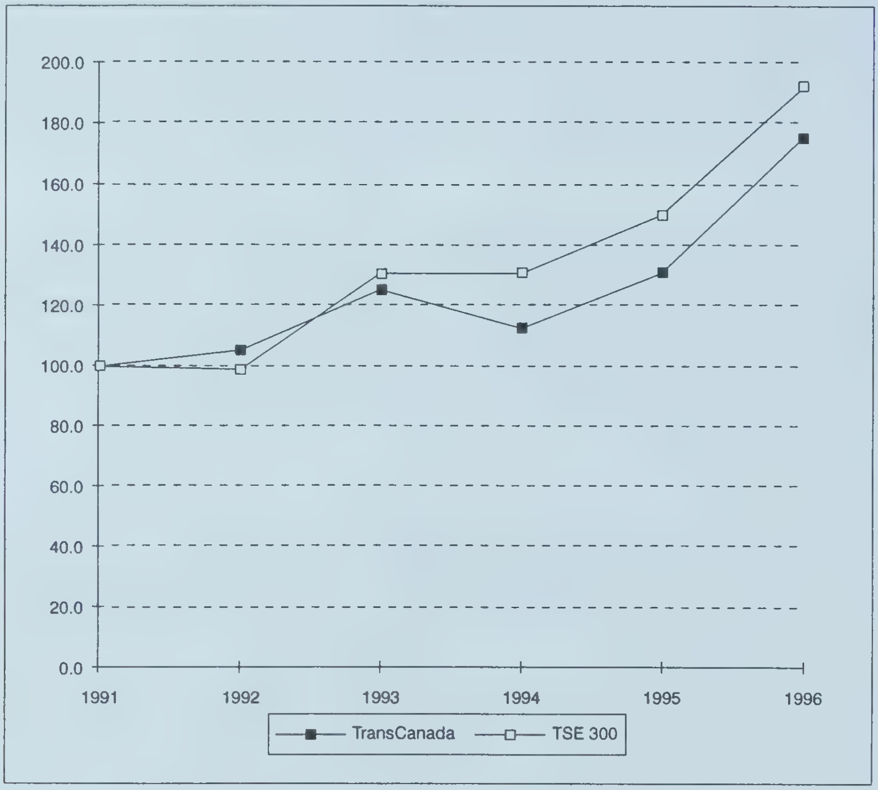
award of 50,000 stock options was made under KESIP (1995) and 50,000 units were granted under PUP. Previously awarded units under PUP accrued a potential future cash value of $133,583.00 for 1996.

Submitted by the Human Resources Committee of the Board of Directors:

A.R. Taylor (Chairman)
W. Dobson
T.E. Kierans
D.S. Macdonald
H.G. Schaefer

Performance Graph

The following chart compares TransCanada's five-year cumulative total shareholder return to the TSE 300 composite index (assuming reinvestment of dividends and considering a $100 investment on December 31, 1991 in TransCanada's common shares):



	1991	1992	1993	1994	1995	1996	Compound Annual Growth
TransCanada	100.0	105.1	125.4	112.2	130.7	175.0	11.85%
TSE 300	100.0	98.6	130.6	130.4	149.4	191.7	13.90%

3. Appointment of Auditors

The Board of Directors recommends that KPMG, Chartered Accountants, be reappointed as the Company's auditors to hold office until the close of the next annual meeting. This firm has served as the auditors of the Company since 1956.

Representatives of KPMG will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

Other Information

Corporate Governance

TransCanada is committed to a high standard of corporate governance. The Company's principal objective in directing and managing its business and affairs is to enhance shareholder value. The Company believes that effective corporate governance improves corporate performance and benefits all shareholders.

The by-laws of The Toronto Stock Exchange and the policy statement of The Montreal Exchange require that companies listed thereon disclose on an annual basis their corporate governance practices as they relate to the "Guidelines for Improved Corporate Governance" contained in the Report of The Toronto Stock Exchange Committee on Corporate Governance in Canada.

The disclosure with respect to the guidelines is set out in tabular form and attached to this Proxy Circular as Schedule "A".

Directors' and Officers' Liability Insurance

The Company maintains Directors' and Officers' Liability Insurance with policy limits of U.S. $150 million in the aggregate, subject to a deductible in respect of corporate reimbursement of U.S. $250,000 for each loss. Generally, under this insurance, the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Major exclusions from coverage include claims arising from illegal acts, those acts which result in personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions) and claims brought by a director or officer against the Company or by the Company against a director or officer except for shareholder derivative actions. For the year ended December 31, 1996, the total annual premium in respect of such insurance was Cdn. $402,411 which was paid entirely by the Company. Of this amount, an estimated $93,417 was paid in respect of directors as a group and $308,994 was paid in respect of officers as a group.

Shareholder Proposals

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 1998 annual meeting of holders of common shares of the Company (expected to be held in April 1998) must be received by the Corporate Secretary of the Company on or before the close of business on January 26, 1998.

Directors' Approval

The contents of this Circular and the sending of it to each shareholder entitled to receive notice of the Meeting, to each director, to the auditors of the Company and to the appropriate governmental agencies, have been approved by the Board of Directors of the Company.

Alison T. Love.

Alison T. Love
Corporate Secretary and
Associate General Counsel

Dated at Calgary, Alberta
March 6, 1997

SCHEDULE "A"

TSE and ME Corporate Governance Guideline	Does TransCanada Align?	TransCanada's practice as it relates to these guidelines
1. Board should explicitly assume responsibility for stewardship of the corporation, and specifically for:		
a. adoption of a strategic planning process	Yes	One of the Board's responsibilities is to ensure that a strategic planning process is in place, and to review and monitor the Company's general strategies and management's success in implementing the strategies. Members of the Board and senior management participate in an annual strategic planning session.
b. identification of principal risks, and implementing risk-managing systems	Yes	TransCanada's Board monitors the systems that have been put in place to address the risks identified by the Company.
c. succession planning and monitoring senior management	Yes	The Human Resources Committee reviews and reports to the Board on management resources and succession planning matters. The CEO is required by his Position Description to ensure capable management succession. TransCanada uses a performance management system to monitor the performance of senior management.
d. communications policy	Yes	It is management's responsibility to ensure the Company maintains effective communication with shareholders and other stakeholders. The Company's shareholder and investor relations personnel are responsible for responding to shareholder communications and addressing feedback from shareholders and other stakeholders with the review, as appropriate, of senior management and the Board.
e. integrity of internal control and management information systems	Yes	The Board satisfies itself that policies and procedures are in place and operating effectively. Each of the following Committees is responsible to review and advise the Board on the following: — Human Resources: employment, succession and remuneration. — Audit and Environment: accounting, internal control and management information systems, compliance of financial reporting with accounting principles, environment, health and safety. — Governance: membership of the Board and its Committees and overview of the effectiveness of management's interaction with and responsiveness to the Board.

TSE and ME Corporate Governance Guideline	Does TransCanada Align?	TransCanada's practice as it relates to these guidelines
2. Majority of directors should be "unrelated" (free from conflicting interest)	Yes	G.W. Watson (CEO) and G.J. Maier (Chairman of the Board and former CEO) are the only Board members who are considered to be related.
3. Disclose for each director whether he or she is "related" (as such term is described in the guidelines), and how that conclusion was reached.	Yes	G.W. Watson (related) is CEO and President of TransCanada. G.J. Maier (considered to be related at this time) is a former CEO and President of TransCanada. He is paid a yearly fee in respect of his duties as Chairman. For the remainder of the proposed directors, none of them or their associates have: • worked for TransCanada; • significant business or other relationships with TransCanada; or • received remuneration from TransCanada in excess of directors' fees. R.E. Dineen, Jr. — Unrelated W. Dobson — Unrelated L.Y. Fortier — Unrelated K.L. Hawkins — Unrelated T.E. Kierans — Unrelated Hon. D.S. Macdonald — Unrelated J.R. Paul — Unrelated H.G. Schaefer — Unrelated A.R. Taylor — Unrelated J.D. Thompson — Unrelated M.K. Witte — Unrelated
4. a. Appoint a Committee responsible for proposing nominees to the Board and assessment of directors	Yes	a. The Governance Committee has the mandate to: • recommend candidates for nomination as directors of the Company; • annually review credentials of nominees for re-election; and • annually assess the performance of individual directors, and recommend action, as appropriate, to the Board. b. An annual directors' questionnaire acts as an assessment by each director to determine, among other things, that issues of corporate governance are raised to the entire Board and to management.
b. That Committee should be composed exclusively of outside directors, the majority of whom are unrelated	Yes	All of the 4 members of the Governance Committee are outside directors, only Mr. Maier is considered a related director.

TSE and ME Corporate Governance Guideline	Does TransCanada Align?	TransCanada's practice as it relates to these guidelines
5. Implement a process for assessing the effectiveness of the Board, its Committees and individual directors	Yes	The Governance Committee as part of its mandate, monitors: • the quality of the relationship between management and the Board; and • assesses annually the effectiveness of the Board, its Committees and individual directors. This process involves the completion by directors of a questionnaire on governance issues. The responses are reviewed by the Committee which reports its findings and recommends action to the full Board. In addition, one Board meeting per year is scheduled to discuss governance issues without management present; and the Chairman meets privately annually with each director to receive his/her views regarding governance issues in the Company.
6. Provide orientation and education programs for new directors	Yes	The Corporate Secretary prepares a "Director's Manual" for new and existing directors, which is updated annually. Informal presentations are made to the Board from time to time on different aspects of TransCanada's business and operations.
7. Consider reducing size of Board, with a view to improving effectiveness	Yes	TransCanada believes that its Board must have enough directors to carry out their duties efficiently, while presenting a diversity of views and experience. The Board reviews the contributions of the directors, and considers whether the current size of the Board promotes effectiveness and efficiency. At this time the Board believes that the size of the Board at 13 directors is appropriate in order to maximize the diversification of experience and to adequately constitute the various committees of the Board.
8. Review compensation of directors in light of risks and responsibilities	Yes	The Governance Committee is mandated to annually review and recommend to the Board for approval, the remuneration of directors. The Committee considers time commitment, comparative fees, responsibilities and risks of directors in determining remuneration.
9. a. Committees should generally be composed of outside directors	Yes	Except for the Executive Committee, all of TransCanada's committees of the Board are composed solely of outside, or non-management directors. G.W. Watson is a member of the Executive Committee.
b. Majority of Committee members should be unrelated	Yes	

TSE and ME Corporate Governance Guideline	Does TransCanada Align?	TransCanada's practice as it relates to these guidelines
10. Appoint a Committee responsible for approach to corporate governance issues	Yes	The Governance Committee is mandated to monitor, assess and report on Board governance of TransCanada. Included in its mandate is the responsibility to: • review the policies and procedures of the Board regarding governance matters; • recommend allocation of directors to the various committees; and • undertake "such other initiatives as are needed to help the Board deliver preeminent corporate governance".
11. a. Define limits to management's responsibilities by developing mandates for:		
(i) the Board	Yes	In 1996 the Board approved a revised "Position Description" for the Board. That document covers such matters as the responsibilities and authorities of the Board. Any responsibility which is not delegated to a Board committee or to the President and CEO remains with the full Board.
(ii) the CEO	Yes	In 1996 the Board approved a revised Position Description for the President and CEO. It sets out the CEO's function and key authorities and responsibilities.
b. Board should approve CEO's corporate objectives	Yes	The Human Resources Committee approves the CEO's written objectives on an annual basis which are then reported to the full Board. These objectives include corporate operational, economic and personal qualitative objectives.
12. Establish procedures to enable the Board to function independently of management	Yes	The Governance Committee seeks to ensure that the Board functions independently of management. The Board meets independently of management where needed. In 1996 the Board held one meeting independent of management to discuss issues relating to governance. The Board will continue to meet from time to time to discuss governance issues affecting the Company.
13. a. Establish an Audit Committee with a specifically defined mandate	Yes	TransCanada's Audit and Environmental Committee is generally mandated to: • monitor audit functions and the preparation of financial statements; • approve the release by the Company of quarterly and annual financial results;

TSE and ME Corporate Governance Guideline	Does TransCanada Align?	TransCanada's practice as it relates to these guidelines
		• evaluate the Company's environmental practices and procedures and advise and make recommendations to the Board on matters relating to the environment; • determine that management has established an effective system of internal controls; • review issues relating to legal and regulatory responsibilities to determine compliance; • meet with the outside auditors independently of management; • meet with the Director, Internal Audit and the Director, Environment, Health & Safety, in each case independently of other management.
b. All members of the Audit Committee should be non-management directors	Yes	
14. Implement a system to enable individual directors to engage outside advisers, at corporation's expense	Yes	Individual directors may engage outside advisers in appropriate circumstances with the authorization of the Chairman of the Board and the CEO.

The Management Proxy Circular dated March 5, 1996 for the Company's last annual meeting has been filed with the securities commissions or similar authorities in Canada. The Annual Information Form of the Company for the year ended December 31, 1996, expected to be dated March 17, 1997, will be filed prior to March 31, 1997 with the securities commissions or similar authorities in Canada, and under cover of Form 40-F with the U.S. Securities and Exchange Commission. The 1996 Management Proxy Circular is available and the Annual Information Form for the year ended December 31, 1996 will be available on or about April 15, 1997 (without charge to holders of common shares of the Company) upon request to the Corporate Secretary and Associate General Counsel, TransCanada PipeLines Limited, P.O. Box 1000, Station "M", Calgary, Alberta, T2P 4K5.

Canadian Mail Service Interruption: If there is a mail service interruption in Canada prior to mailing by a shareholder of a completed proxy to TransCanada's transfer agent, Montreal Trust, it is recommended that the shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of Montreal Trust:

Alberta
530 - 8th Avenue S.W., Suite 600
Calgary

10200 - 102nd Avenue, Suite 1101
Edmonton

British Columbia
510 Burrard Street, 2nd Floor
Vancouver

Saskatchewan
1783 Hamilton Street, Suite 660
Regina

Manitoba
200 Portage Avenue
Winnipeg

Ontario
151 Front Street, W., 8th Floor
Toronto

Québec
1800 McGill College Avenue, 6th Floor
Montréal

New Brunswick
53 King Street
Saint John

Nova Scotia
1465 Brenton Street, 5th Floor
Halifax

Prince Edward Island
143 Grafton Street
Charlottetown

Newfoundland
245 Water Street
St. John's

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TRANSCANADA PIPELINES LIMITED

Notice of 1999 Annual and Special Meeting of

Shareholders and Management Proxy Circular

March 2, 1999

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TransCanada

Dear Shareholder:

You are invited to attend the Annual and Special Meeting of the common shareholders of TransCanada PipeLines Limited which will be held at the Telus Convention Centre, 120 - 9th Avenue S.E., Calgary, Alberta on Friday, April 30, 1999 at 10:30 a.m. (Mountain Daylight Savings time).

In addition to the regular business of receiving financial statements, electing directors and appointing auditors, you will be asked to consider and vote upon the confirmation of certain amendments to By-law Number 1 and the approval of a proposed amendment to the Company's Articles.

Your participation in this meeting is very important to the Company, regardless of the number of shares you hold. If you are unable to attend in person, please complete, date, sign and promptly return the enclosed form of proxy in the envelope provided for this purpose. If you intend to be present at the meeting, you may nevertheless find it convenient to express your views in advance by returning the form of proxy duly completed.

Proxies are counted and tabulated by Montreal Trust Company of Canada, the transfer agent of the Company, in such a manner as to preserve the confidentiality of individual shareholder votes, except (a) where the shareholder has made a written comment on the proxy form which is clearly intended for management, (b) as necessary to meet legal requirements or (c) in the event of a proxy contest.

Following the custom of past meetings, we will review with you the business and affairs of the Company and our outlook for the future at the conclusion of the meeting.

Sincerely yours,

G.W. Watson
President and Chief Executive Officer

March 2, 1999

Your vote is very important. The board of directors urges you to complete, date, sign and return today the enclosed proxy in the enclosed envelope. If your shares are held in the name of a broker or nominee, you must provide voting instructions to the broker or nominee in order for your shares to be represented at the annual and special meeting. For assistance or further information, please call

TransCanada's Investor Relations Department
toll-free at 1-800-361-6522 or call
Montreal Trust (403) 267-6555 or 1-800-558-0046

TransCanada

TransCanada PipeLines Tower
111 - Fifth Avenue S.W.
Calgary, Alberta
Canada T2P 3Y6

NOTICE OF ANNUAL AND SPECIAL MEETING

NOTICE IS HEREBY GIVEN that the Annual and Special Meeting (the "Meeting") of the holders of common shares (the "common shares") of TransCanada PipeLines Limited (the "Company") will be held at the Telus Convention Centre, 120 - 9th Avenue S.E., Calgary, Alberta on Friday, April 30, 1999 at 10:30 a.m. (Mountain Daylight Savings time) for the following purposes:

(1) to receive the consolidated financial statements for the year ended December 31, 1998 and the auditors' report thereon;

(2) to elect directors;

(3) to appoint auditors and authorize the directors to fix their remuneration as such;

(4) to consider and, if deemed appropriate, to pass, with or without variation, an ordinary resolution confirming amendments to By-law Number 1, as described in the enclosed Management Proxy Circular, which is incorporated by reference herein;

(5) to consider and, if deemed appropriate, to pass, with or without variation, a special resolution (the full text of which is set forth in Appendix B to the accompanying Management Proxy Circular) authorizing the Corporation to apply for a Certificate of Amendment under the *Canada Business Corporations Act* to amend the Articles of the Company, as described in the enclosed Management Proxy Circular; and

(6) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of common shares are invited to attend the Meeting. Shareholders of record at the close of business on March 12, 1999 will be entitled to vote at the Meeting unless a shareholder has transferred shares after that date and the new holder of such shares establishes proper ownership and requests, not later than the close of business on April 20, 1999, to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to complete, date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting. To be used at the Meeting, proxies must be received before 4:30 p.m. (Mountain Daylight Savings time) on Wednesday, April 28, 1999 by the Company's transfer agent, Montreal Trust Company of Canada, Stock Transfer Services, 600, 530 - 8th Avenue S.W., Calgary, Alberta, Canada T2P 3S8 or be presented at the Meeting.

The 1998 Annual Report, the Management Proxy Circular and a form of proxy accompany this Notice of Meeting.

By Order of the Board of Directors,

Rhondda E.S. Grant
Corporate Secretary and
Associate General Counsel, Corporate

Calgary, Alberta
March 2, 1999

TransCanada

MANAGEMENT PROXY CIRCULAR

General Information

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by management of TransCanada PipeLines Limited (the "Company" or "TransCanada") to be used at the annual and special meeting and at any adjournment or adjournments thereof (the "Meeting") of holders of common shares (the "common shares" or "shares") of the Company to be held in Calgary, Alberta on Friday, April 30, 1999, at the place and for the purposes set out in the accompanying Notice of Annual and Special Meeting (the "Notice of Meeting").

It is anticipated that copies of this Circular, the Company's 1998 Annual Report and the form of proxy for shareholders will be first distributed to shareholders on or before March 29, 1999. The cost of soliciting proxies will be borne by the Company. While most proxies will be solicited by mail only, some shareholders may also be contacted by Company employees personally or by telephone. In addition, the Company will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of common shares registered in the names of such brokers, custodians, nominees and fiduciaries.

Unless otherwise stated, the information contained in this Circular is given as of the date hereof and all dollar amounts set forth herein are in Canadian dollars.

Record Date for Notice of Meeting and Provisions Relating to Voting

The Board of Directors of the Company has fixed March 12, 1999 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share shown as registered in such holder's name on the list of shareholders prepared as of the close of business on the record date, unless a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership and requests the Corporate Secretary of the Company, not later than the close of business on April 20, 1999, to include such holder's name on the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 600, 530 - 8th Avenue S.W., Calgary, Alberta T2P 3S8 and will be available for inspection at the Meeting.

Appointment of Proxy Holders

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 4:30 p.m. (Mountain Daylight Savings time) on Wednesday, April 28, 1999, or must present a properly executed proxy at the Meeting. All shares represented by a properly executed proxy will be voted or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted in favour of: (i) the election of the persons nominated for election as directors; (ii) the appointment of KPMG LLP, Chartered Accountants, as auditors and the authorization of the directors to set their remuneration as such; (iii) confirming the amendments to By-law Number 1 of the Company; and (iv) the amendment to the Articles of the Company, in each case as more fully described elsewhere in this Circular.

The enclosed form of proxy, when properly signed, confers discretionary authority on the person or persons named to vote on any amendment to matters identified in the Notice of Meeting and on any other matter properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted at the discretion of the person or persons named therein. The persons named in the form of proxy are officers of the Company.

Revocability of Proxies

A shareholder may revoke a proxy by depositing an instrument in writing executed by such shareholder or such shareholder's attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of the Company, 111 - 5th Avenue S.W., Calgary, Alberta, T2P 3Y6, at any time up to and including the last business day preceding the day of the Meeting or any adjournment thereof, or with the Chair of the Meeting on the day of the Meeting.

Voting Shares and Principal Shareholders

At February 28, 1999, the number of outstanding common shares was 466,254,351. Each common share carries one vote and such shares are the only class of the Company's shares entitled to be voted at the Meeting.

To the knowledge of the directors and officers of the Company, based on information at February 28, 1999, no individual or corporation beneficially owned, directly or indirectly, or exercised control over, more than 5% of the outstanding common shares of the Company.

Business to be Transacted at the Meeting

This Circular contains information relating to the receipt of the Company's consolidated financial statements, the election of Directors, the appointment of auditors, the amendments to By-law Number 1 and the amendment to the Company's Articles.

1. Financial Statements

The consolidated financial statements of the Company for the year ended December 31, 1998 and the report of the auditors thereon will be placed before the Meeting. Additional copies of the Annual Report (which contains the consolidated financial statements), in English or French, may be obtained from the Corporate Secretary of the Company upon request and will be available at the Meeting.

2. Election of Directors

TransCanada's Articles provide for the Board of Directors to consist of a minimum of 10 and a maximum of 20 directors. The number of directors presently in office is 17. Six of the current directors (Sir J. Graham Day, and Messrs. J.J. Healy, H.N. Hotchkiss, G.M. Maier, C.E. Ritchie and A.R. Taylor) have indicated their intention to retire from the Board, and Messrs. D.D. Baldwin, D. D'Alessandro, and W.T. Stephens have agreed to stand for election to the Board along with the remaining 11 incumbent directors. The Board has set the number of directors to be elected at the Meeting at 14.

The Governance Committee of the Board of Directors reviews annually the qualification of persons proposed for election to the Board of Directors and submits its recommendations to the Board for consideration. The persons proposed for nomination below are, in the opinion of the Board of Directors and in the opinion of management, well qualified to act as directors for the ensuing year. Each nominee has established his or her eligibility and willingness to serve as a director if elected. The persons named in the form of proxy are officers of the Company who intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the form of proxy to withhold such vote. If, prior to the Meeting, any of the listed nominees becomes unable or unwilling to serve, the

persons named in the form of proxy will have the right to use their discretion in voting for a properly qualified substitute. Each director elected will hold office until the next annual meeting or until his or her successor is earlier elected or appointed.

Information Concerning the Directors

General Information

Set forth below are the names of the 14 proposed nominees; their municipalities of residence; their principal occupations or employment during the past five years including all positions and offices presently held by them with the Company and its significant affiliates; the year from which each has continually served as a director of the Company, where applicable; and the number of each class of securities of the Company owned by each of them or over which control or direction is exercised by each of them:

Proposed Nominee[1]	Principal Occupation	Director Since	Voting Securities owned, controlled or directed[2]
 Douglas D. Baldwin Calgary, Alberta	Senior Vice-President and Director, Imperial Oil Limited (oil and gas) until his retirement on December 31, 1998.	N/A	2,500
 Ronald B. Coleman Calgary, Alberta	President, R. B. Coleman Consulting Co. Ltd. and Chairman, Dominion Equity Resource Fund Inc. (oil and gas activities).	July 1998[3]	14,592[4]
 Dominic D'Alessandro Toronto, Ontario	President and Chief Executive Officer, The Manufacturers Life Insurance Company (insurance).	N/A	Nil

Proposed Nominee[1]	Principal Occupation	Director Since	Voting Securities owned, controlled or directed[2]
 Wendy Dobson Uxbridge, Ontario	Professor, Faculty of Management and Director, Institute for International Business, University of Toronto.	April 1992	4,000
 Richard F. Haskayne Calgary, Alberta	Chairman of the Board of the Company and of MacMillan Bloedel Limited (forest products). Prior to July 1998 he was Chairman of the Board of NOVA Corporation (energy services) and prior to September 1998 he was Chairman of the Board of TransAlta Corporation (electric utility).	July 1998[5]	103,046[6]
 Kerry L. Hawkins Winnipeg, Manitoba	President, Cargill Limited (grain handlers, merchants, transporters and processors of agricultural products).	April 1996	3,907[7]
 The Hon. Donald S. Macdonald, P.C., C.C. Toronto, Ontario	Counsel, McCarthy Tétrault (barristers and solicitors).	October 1991	1,649

Proposed Nominee[1]	Principal Occupation	Director Since	Voting Securities owned, controlled or directed[2]
 J.M. (Jack) MacLeod Calgary, Alberta	Director, Trimac Limited, BOVAR Inc., Sun Life Assurance Company of Canada, International Institute of Sustainable Development, Golden Trend Petroleum Ltd., Citadel Diversified Management Ltd. and Alberta Northeast Gas.	July 1998[8]	11,700[9]
 Harold P. Milavsky Calgary, Alberta	Chairman, Quantico Capital Corp., (principal investments and acquisitions, merchant banking and investment advisory services). Prior to July 1994, he was Chairman of the Executive Committee and a director of Trizec Corporation Ltd. (commercial real estate).	July 1998[10]	32,060[11]
 James R. Paul Houston, Texas	Chairman, James and Associates, (private investment firm). Mr. Paul's career was spent in the oil and gas, coal and utilities businesses in the United States. Mr. Paul is also a director of Louis Dreyfus Natural Gas Corp.	April 1996	9,000
 Harry G. Schaefer Calgary, Alberta	President, Schaefer & Associates (business advisory service company), Chairman, Crestar Energy Inc., Vice-Chair, TransCanada and a corporate director on the Boards of a number of Canadian companies. Prior to May 1996, Mr. Schaefer was Chairman of TransAlta Utilities Corporation (generation and sale of electric energy).	April 1987	17,196[12]

Proposed Nominee[1]	Principal Occupation	Director Since	Voting Securities owned, controlled or directed[2]
 W. Thomas Stephens Vancouver, British Columbia	President and Chief Executive Officer, MacMillan Bloedel (forest products). Mr. Stephens was Chairman and Chief Executive Officer, Johns Manville (building materials company) from 1986 to 1996.	N/A	2,000
 Joseph D. Thompson Edmonton, Alberta	Chairman, PCL Construction Group Inc, (general construction contractors). Prior to July 1997, Mr. Thompson was Chairman, President and Chief Executive Officer of PCL Construction Group Inc.	April 1995	10,838[7][13]
 George W. Watson Calgary, Alberta	President and Chief Executive Officer of the Company. Prior to April 1994, Mr. Watson was President of the Company.	August 1993	445,131[14]

Notes:

(1) *With the exception of Mr. Paul, who is a United States resident, all nominees are Canadian residents. The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by each of the nominees. Except as indicated in these Notes, the nominees have sole voting and dispositive power with respect to the securities listed above.*

(2) *As to each class of shares of TransCanada, the percentage of outstanding shares beneficially owned by any one director or nominee or by all directors and officers of the Company as a group does not exceed 1% of the class so owned. Voting securities include common shares the directors have a right to acquire through the exercise of stock options that are vested or that will vest within 60 days of the date of this Circular under the Company's Key Employee Stock Incentive Plan (1995) ("KESIP (1995)") and common shares the directors have a right to acquire under the Company's Deferred Share Unit Plan for Directors (the "DSU Plan"), both of which plans are described elsewhere in this Circular.*

(3) *Prior to joining the Board and since June 18, 1987, Mr. Coleman was a director of NOVA.*

(4) *The shares listed include 8,408 shares owned directly by Mr. Coleman and 6,184 shares as to which Mr. Coleman has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP (1995).*

(5) *Prior to joining the Board and since May 2, 1991, Mr. Haskayne was a director of NOVA.*

(6) *The shares listed include 34,670 shares owned directly by Mr. Haskayne and 68,376 shares as to which Mr. Haskayne has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP (1995).*

(7) *The shares listed for Messrs. Hawkins and Thompson include 305 shares which each of Messrs. Hawkins and Thompson have a right to acquire under the DSU Plan.*

(8) *Prior to joining the Board and since February 26, 1993, Mr. MacLeod was a director of NOVA.*

(9) *The shares listed include 5,516 shares owned directly by Mr. MacLeod and 6,184 shares as to which Mr. MacLeod has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP (1995).*

(10) *Prior to joining the Board and since April 26, 1988, Mr. Milavsky was a director of NOVA.*

(11) *The shares listed include 25,876 shares owned directly by Mr. Milavsky and 6,184 shares as to which Mr. Milavsky has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP (1995).*

(12) *The shares listed include 4,234 shares held by a company controlled by Mr. Schaefer's mother, 1,089 shares held by Mr. Schaefer's wife and 2,643 shares held by a company controlled by Mr. Schaefer's wife. Mr. Schaefer disclaims beneficial ownership of such shares.*

(13) *The shares listed include 3,610 shares held by a family trust, the beneficial owners of which are children of Mr. Thompson and Mr. Thompson's wife. Mr. Thompson disclaims beneficial ownership of such shares.*

(14) *The shares listed include 39,249 shares owned directly by Mr. Watson and 405,882 shares as to which Mr. Watson has the right to acquire beneficial ownership through the exercise of stock options granted under KESIP (1995).*

Information Concerning the Compensation of Directors and Officers

Compensation of Directors

When the arrangement between the Company and NOVA Corporation ("NOVA") became effective on July 2, 1998, a new board of directors was established for the Company, made up of nine previous members of the Company's Board (Dr. Dobson and Messrs. Hawkins, Macdonald, Maier, Paul, Schaefer, Taylor, Thompson and Watson) and nine previous members of the NOVA Board (Sir Graham Day, Ms. Wexler and Messrs. Coleman, Haskayne, Healy, Hotchkiss, MacLeod, Milavsky and Ritchie; Ms. Wexler subsequently retired from the Board of the Company). Part of NOVA's directors' compensation had been the granting of options to directors under NOVA's stock option plan. As part of the arrangement, all NOVA options were converted into options of NOVA (which split off as a separate public commodity chemicals company) and KESIP (1995) options of the Company. It is for this reason that the directors of the Company who were formerly directors of NOVA hold options under KESIP (1995). KESIP (1995) is, except for options issued under KESIP (1995) to former NOVA option holders as a result of the arrangement, restricted to employees of the Company. The Board has determined, subsequent to the arrangement, that options will not form part of directors' compensation at the Company.

Effective June 30, 1998, the Company's directors' compensation practices were revised to reflect the increased size and complexity of the Company and to reinforce the emphasis the Company wished to make on linking directors' compensation with shareholder value. This resulted in some increases to retainers paid to directors, the Chair and the Vice-Chair for the second half of 1998 and the affirmation of the Company's policy requiring each director to acquire and hold a minimum number of shares of the Company equal in value to five times the annual directors' retainer fee. Directors have a maximum of five years to reach this level of share ownership, which can be achieved by direct purchase of that number of shares or by means of directing the directors' retainer fees into the Company's Dividend Reinvestment and Share Purchase Plan or into the Deferred Share Unit Plan (see "Deferred Share Unit Plan for Directors").

For the first six months of 1998, each director who was not an employee of the Company was paid in quarterly installments in arrears as follows: a directors' retainer fee of $22,000 per annum; a committee retainer fee of $3,000 per annum for each Committee of the Board of Directors of which he or she was a member; and an additional fee of $4,000 per annum for each Committee of the Board of Directors of which he or she was Chair. The Company also paid each director a fee of $1,500 for attendance at each meeting or adjourned meeting of the Board of Directors or a Committee thereof, a travel fee of $1,000 for meetings for which round-trip travel time exceeded three hours, and reimbursed the directors for out-of-pocket expenses incurred in attending such meetings. Directors who were U.S. residents were paid in U.S. dollars. Mr. Watson, as an employee of the Company, was not paid director's fees. In addition to the above fees, the Chair was paid $200,000 per annum as a retainer fee, in respect of his duties as Chair.

For the second six months of 1998, each director who was not an employee of the Company, other than the Chair, was paid in quarterly installments in arrears as follows: a directors' retainer fee of $27,000 per

annum; a committee retainer fee of $3,000 per annum for each Committee of the Board of Directors of which he or she was a member; and an additional fee of $4,000 per annum for each Committee of the Board of Directors of which he or she was Chair. The Company also paid each such director a fee of $1,500 for attendance at each meeting or adjourned meeting of the Board of Directors or a Committee thereof, a travel fee of $1,500 for meetings for which round-trip travel time exceeded three hours, and reimbursed the directors for out-of-pocket expenses incurred in attending such meetings. Directors who were U.S. residents were paid in U.S. dollars. Mr. Watson, as an employee of the Company, was not paid directors' fees. The Chair, who was paid none of the other directors' fees outlined above, was paid a retainer fee of $300,000 per annum in respect of his duties as Chair, $3,000 per chaired Board meeting and reimbursed for certain office and other expenses. The Vice-Chair was paid a retainer fee of $12,000 per annum in respect of his duties as Vice-Chair, in addition to his other director's fees as outlined above.

Deferred Share Unit Plan for Directors

In November 1998, the Board of Directors approved a deferred share unit plan ("DSU Plan") for non-employee directors. The DSU Plan contains a mechanism whereby board members can, on a quarterly basis, direct their annual directors' retainer fees to acquire units representing the right to acquire shares. Additional units are acquired quarterly in amounts equal to the amount of common shares which could be acquired if dividends were payable on the units and were reinvested in common shares. The units are not eligible for the acquisition of common shares of the Company until termination of such director's service on the Company's Board.

Compensation of Officers

Prior to the arrangement with NOVA, both NOVA and the Company had their own compensation plans. Under the terms of the arrangement with NOVA, certain of the NOVA plans were adopted by the Company and remained in place for the benefit of Company employees who were formerly NOVA employees through the balance of 1998. Certain NOVA originated plans or programs will remain in effect through 1999 as well. The Company has developed a common set of compensation plans and programs which will be instituted over the course of 1999 and will be effective in 2000. For this reason, certain types of executive compensation described below are described as two sets of plans: those that apply to executive officers who were NOVA employees prior to the arrangement, and those that apply to all other executive officers of the Company. Of the Named Executive Officers (defined below under "Summary Compensation Table") only Mr. Simpson is a former NOVA employee. When a separate NOVA-originated plan is not described, former NOVA employees are entitled to participate in the Company plan as described.

Description of Plans

A) Key Employee Stock Incentive Plan

In 1979 the Company established the Key Employee Stock Incentive Plan, which was amended and restated in April 1995. The plan is currently in place until December 31, 2004. The amended and restated plan is called the Key Employee Stock Incentive Plan (1995). Officers or directors holding salaried employment with the Company are eligible to participate in KESIP (1995). As a result of the arrangement, however, persons who held NOVA options at the effective date of the arrangement, including the eight current directors of the Company who were previously directors of NOVA, hold KESIP (1995) options (see "Compensation of Directors"). As part of the arrangement, options outstanding under the NOVA option plan were divided into replacement KESIP (1995) and NOVA options, on the basis of an equal division of the option holder's existing inherent benefit. At the same time all options then outstanding under KESIP (1995) were cancelled and replaced with replacement KESIP (1995) options. An adjustment formula was applied to adjust the exercise price of the replacement KESIP (1995) options and the number of shares outstanding under such options in a manner intended to preserve, without augmenting, the accrued benefit inherent in the KESIP (1995) options at the time of the arrangement.

The total number of common shares reserved for issuance under KESIP (1995) was increased to 25,000,000 as part of the arrangement.

KESIP (1995) is administered by the Human Resources Committee of the Board of Directors. The exercise price of options is determined by the Human Resources Committee at the time options are awarded and is equal to the weighted average closing price of the common shares of the Company on The Toronto Stock Exchange during the five trading days immediately preceding the award dates. Options granted under KESIP (1995) vest as to 25% on the date of grant and as to 25% on each anniversary thereafter for a period of three years. At the time of awarding an option, the expiry date (the last day on which the option is exercisable, generally 10 years from the date on which it was granted) is established.

Under KESIP (1995) approximately 13,064,421 common shares were issuable under outstanding options at March 2, 1999.

B) **Performance Unit Plan**

In 1995 the Company established a Performance Unit Plan ("PUP"), which is administered by the Human Resources Committee of the Board of Directors. The purpose of PUP is to provide an incentive to the Company's senior management to focus, in their decision making and business strategies, on factors that will enhance the capital appreciation of the common shareholders' investment in the Company and to maximize the Company's current earnings thereby enabling common share dividends to be paid by the Company to the maximum extent possible. Officers or directors holding salaried employment with the Company or any of its subsidiaries were eligible to participate in PUP in 1998.

With respect to the KESIP (1995) replacement options issued to TransCanada employees as part of the arrangement, the associated performance units were adjusted by the same adjustment formula applied to KESIP (1995) options. The effect of this formula was to preserve the accrued benefit to the effective date of the arrangement.

None of the KESIP (1995) options issued under the arrangement to former NOVA option holders had performance units associated with them.

Under PUP, a unit accrues annually a cash amount equal to the dividends paid on a common share in a financial year, provided the Company's total shareholder return is equal to or greater than that of the peer group index for such financial year, or if the Company's total shareholder return is less than that of the peer group index for such year, such lesser amount, if any, as may be determined by the Human Resources Committee in its discretion. The actual amount accrued on a unit during a financial year may not, in any event, exceed the dividends paid on one common share during such financial year.

A performance unit may be exercised for the amount accrued on the unit at any time during the period which begins on the third anniversary of the award date and is deemed to be exercised automatically on the tenth anniversary of the award date. However, at the time of exercise the market price of a common share plus the amount accrued on the unit must be equal to or greater than the market price of a common share on the award date of the unit, and a KESIP (1995) option, if any, awarded on the same date as the unit, must have been previously exercised.

As at March 2, 1999, 8,333,349 units under PUP were outstanding.

C) **Incentive Compensation Program**

The Incentive Compensation Program ("ICP") plan provides that a portion of the overall cash compensation of officers and senior management employees of the Company and its subsidiaries is at risk, to be paid only if certain objectives are achieved. The cash awards are determined during the first quarter of the financial year following the financial year to which the awards relate. The awards can range from nil to preset limits thus placing a portion of the compensation at risk each year. The intention of the plan is to link closely participants' overall cash compensation to the performance of the Company and its business units as well as to their respective individual performance. By doing so, officers and senior management are encouraged to work towards the attainment of overall Company and business unit goals. Eligibility for participation in and the criteria used to determine amounts payable under ICP for officers are determined by the Human Resources Committee. In 1998 payouts for the first six months were made under the ICP in July, after the arrangement became effective. Payouts for the balance of 1998 were made in March 1999. The aggregate 1998 ICP payouts are reflected in the "Summary Compensation Table" below.

With respect to the first six months of 1998, former NOVA employees participated in NOVA's Management Incentive Plan (MIP). The MIP was designed to recognize the contributions to corporate and business results of executive officers and senior managers. The MIP provided for annual cash awards based on corporate and business unit performance and individual contribution to NOVA's results, measured against objectives which were determined at the beginning of each calendar year. The guiding principle of the MIP was to achieve a total compensation position, including base salary and management incentive target award, at the 75th percentile of similar organizations if performance objectives, as approved by the Board of Directors, were achieved. A targeted incentive award for each participant was set at the beginning of each year. For business unit management target awards were weighted 30% on individual contribution and 70% on corporate and business results. For corporate management the weighting factor was 50% corporate performance and 50% individual contribution.

For the first six months of 1998, NOVA's Human Resources Committee approved a pro-rated payout of MIP at target for all participants. In the second six months of 1998, employees of the Company who were eligible for the MIP prior to the arrangement became eligible to participate in the ICP, and all ICP participants set new individual objectives and became subject to common corporate performance objectives and, as applicable, business unit performance objectives. However, former NOVA participants in the ICP had the former NOVA targets applicable to them, while the rest of the ICP participants were subject to TransCanada targets.

A common incentive compensation plan has been put in place for 1999. All employees of the Company will participate in the plan, which will have components to align employees' interests with business unit and corporate objectives and to recognize individual achievements.

D) **Employee Savings Plans**

The Employee Savings Plan ("ESP") provides all employees of the Company (except former NOVA employees) with a means to participate in the profit performance of the Company. Officers participate in this plan on the same basis as all other TransCanada employees. Under a flexible benefit plan established in 1993, each employee is entitled to a contribution by the Company of an amount equal to 3% of that employee's salary for the purchase of common shares. Additional amounts of up to an approximate average of 3.5% of the employee's salary may be contributed by the Company depending on the employee's desired use of flexible benefit credits. The shares and the dividends thereon are allocated to the employees' accounts once a year. All shares allocated under the ESP vest upon allocation to the employee's account.

On the arrangement, the Company adopted the provisions of the NOVA Savings and Profit Sharing Plan to apply to employees who were formerly NOVA employees. The plan has been amended and restated as the Employee Savings and Profit Sharing Plan for New TransCanada Employees ("ESPS-NTC"). This plan provides a basic contribution of 4% of the employee's base salary. In addition, employees are eligible for a profit sharing contribution from 0% to 6% of their previous year's salary, contingent upon the Company's performance for that year. The Company contributes an additional 20% of the basic and profit sharing contribution on amounts invested in eligible TransCanada common shares and on employee voluntary contributions invested in eligible TransCanada common shares (to a maximum of 4%). All amounts in this plan vest immediately to the employee.

Summary Compensation Table

The following table provides a summary of the remuneration earned by the Chief Executive Officer and the four other most highly compensated policy-making executive officers of TransCanada (collectively, the "Named Executive Officers") for services rendered in all capacities during the financial years ended December 31, 1998, 1997 and 1996. Specific aspects of this compensation are described in the following tables.

	Annual Compensation				Long-Term Compensation		
					Awards	Payouts	
Name and Principal Position of the Named Executive Officers	Year	Salary $	Bonus(1) $	Other Annual Compensation(2) $	Securities Under Options Granted(3) (#)	LTIP Payouts $	All Other Compensation(4) $
G.W. Watson President and Chief Executive Officer	1998 1997 1996	614,000 590,000 560,000	625,000 350,000 450,000	62,651 66,772 63,783	135,000 85,000 50,000	0 0 0	22,253 15,000 39,404
B.W. Simpson(5) Executive Vice-President	1998	190,517	155,000	24,052	35,000	0	0
S.J.J. Letwin(6) Senior Vice-President, Corporate Services and Chief Financial Officer	1998 1997 1996	327,984 338,933 221,550	222,000 69,170 210,000	74,766 71,429 25,130	45,000 45,000 21,600	0 0 0	13,941 0 0
R.J. Reid Senior Vice-President and President, Canadian Mainline	1998 1997 1996	280,000 270,000 235,000	190,000 125,000 165,000	13,516 34,437 18,763	35,000 40,000 21,600	0 0 0	17,949 12,400 7,200
G.P. Mihaichuk Senior Vice-President and President, International Business Unit	1998 1997 1996	280,000 270,000 130,000	190,000 100,000 75,000	13,079 11,493 40,000	45,000 45,000 71,600	0 0 0	0 0 0

Notes:

(1) *Amounts referred to in this table as "Bonus" are paid pursuant to the Company's ICP (described above under "Description of Plans — Incentive Compensation Program").*

(2) *Perquisites and other personal benefits do not, in the aggregate, exceed the lesser of $50,000 and 10 per cent of the total of the annual salary and bonus for any of the Named Executive Officers. The amounts in this column include the value of salary paid in lieu of vacation, and TransCanada's contributions under ESP (described above under "Description of Plans — Employee Savings Plans"). Mr. Simpson's amount includes contributions to the ESPS-NTC (described above under "Description of Plans-Employee Savings Plan"). There will be a profit sharing payment to be made under the ESPS-NTC for the period July to December 1998, but it will not be made until April 1999, after the date of this Circular.*

(3) *The amounts in this column reflect the number of stock options granted under KESIP (1995) to each of the Named Executive Officers in each of the years referred to. A similar number of performance units were granted in 1998, 1997 and 1996 under PUP (described above under "Description of Plans — Performance Unit Plan"). For the most recent year, although the stock option grant was approved in March 1999, it was earned by the Named Executive Officer in the year ended December 1998.*

(4) *The amounts in this column include amounts paid to the Named Executive Officers by subsidiaries and affiliates of TransCanada (including directors' fees paid by affiliates and amounts paid for serving on management committees of partnerships in which TransCanada holds an interest).*

(5) *Mr. Simpson became Executive Vice-President of the Company on July 2, 1998. The amounts included in the table for the 1998 year for Mr. Simpson relate to compensation he actually earned as an officer of TransCanada during the last six months of 1998. However, Mr. Simpson's TransCanada salary was annualized for the purpose of determining if he qualified as a Named Executive Officer.*

(6) *Mr. Letwin relocated from the United States to Canada on July 2, 1998 and a relocation allowance of $43,992 is included in "Other Annual Compensation". Mr. Letwin was not eligible to participate in the ESP during 1998, but received a contribution of $9,768 under the 401K and Savings Plan of a TransCanada U.S. subsidiary. He is eligible for an additional distribution under that plan of up to 5% for 1998, which will not be paid (if declared) until April 1999. Mr. Letwin's base salary from January 1, 1998 to July 2, 1998 was U.S. $257,000. The 1998 average noon rate for one U.S. dollar as reported by the Bank of Canada was Cdn. $1.4835.*

The following table sets forth information regarding long-term incentive plan awards made to the Named Executive Officers during the financial year ended December 31, 1998. See "Description of Plans — Performance Unit Plan" for information with respect to this plan.

Long-Term Incentive Plans — Awards in 1998

Name	Units[1] (#)	Period Until Maturation[2]	Estimated Future Payouts Under Non-Securities Price-Based Plans		
			Threshold ($ or #)	Target ($ or #)	Maximum ($)
G.W. Watson	135,000	March 1, 2009	N/A	N/A	N/A
	106,939	December 9, 2007	N/A	N/A	129,396
	62,905	December 5, 2006	N/A	N/A	134,115
	38,991	July 31, 2005	N/A	N/A	147,593
	80,518	December 6, 2005	N/A	N/A	240,787
B.W. Simpson	35,000	March 1, 2009	N/A	N/A	N/A
S.J.J. Letwin	45,000	March 1, 2009	N/A	N/A	N/A
	56,614	December 9, 2007	N/A	N/A	68,503
	27,175	December 5, 2006	N/A	N/A	57,938
	22,897	December 6, 2005	N/A	N/A	68,473
R.J. Reid	35,000	March 1, 2009	N/A	N/A	N/A
	50,324	December 9, 2007	N/A	N/A	60,892
	27,175	December 5, 2006	N/A	N/A	57,938
	13,128	July 31, 2005	N/A	N/A	49,694
	26,294	December 6, 2005	N/A	N/A	78,632
G.P. Mihaichuk	45,000	March 1, 2009	N/A	N/A	N/A
	56,614	December 9, 2007	N/A	N/A	68,503
	27,175	December 5, 2006	N/A	N/A	57,938
	62,905	May 15, 2006	N/A	N/A	161,115

Notes:

(1) *For the most recent year, although the PUP award was approved in March 1999, it was earned by the Named Executive Officer in 1998. The performance unit awards outstanding on July 2, 1998 were adjusted in accordance with the stock option adjustment formula in connection with the arrangement with NOVA. The Human Resources Committee determined in March 1999 that $1.21 accrued in respect of the awards made in 1995, 1996 and 1997, for each Named Executive Officer. No amount has been accrued in respect of the awards made on March 1, 1999, as such awards are not eligible for the annual cash accrual until January 1, 2000. The amounts referred to herein have not and may never be received by the Named Executive Officers. See "Description of Plans — Performance Unit Plan".*

(2) *The exercise period for these units is from the third to the tenth anniversary of the award date. See "Description of Plans — Performance Unit Plan".*

Options Granted During the Most Recently Completed Financial Year

The following table sets forth the stock option awards under KESIP (1995) earned during the financial year ended December 31, 1998 to each of the Named Executive Officers. See "Description of Plans — Key Employee Stock Incentive Plan" for information with respect to this plan. These amounts do not reflect the replacement KESIP (1995) options issued pursuant to the arrangement with NOVA.

Name	Number of Common Shares Under Options Granted(1)(2)	% of Total Options Granted to Employees in 1998	Exercise Price ($/common share)(3)	Market Value of Common Shares Underlying Options on the Date of Grant ($/common share)	Expiration Date
G.W. Watson	135,000	3.80	20.58	20.55	March 1, 2009
B.W. Simpson	35,000	0.98	20.58	20.55	March 1, 2009
S.J.J. Letwin	45,000	1.27	20.58	20.55	March 1, 2009
R.J. Reid	35,000	0.98	20.58	20.55	March 1, 2009
G.P. Mihaichuk	45,000	1.27	20.58	20.55	March 1, 2009

Notes:

(1) The Board of Directors did not approve of any grants of options under KESIP (1995) to the Named Executive Officers during the financial year ended December 31, 1998 as the timing of Board approvals for such grants has changed to March of each year from December. Annual option grants for 1998 were approved by the Board in March 1999 and are reflected in this Circular.

(2) Twenty-five percent of the options are exercisable upon the award date, and twenty-five percent thereafter on each of the first three anniversary dates of the granting of the option.

(3) The exercise price is equal to the weighted average closing price of TransCanada's common shares on The Toronto Stock Exchange during the five trading days immediately prior to the grant of the options.

Aggregate Option Exercises During 1998 Financial Year and 1998 Financial Year-End Option Values

The following table summarizes, for each of the Named Executive Officers, the number of stock options, if any, exercised during the financial year ended December 31, 1998, the aggregate value realized upon exercise, the total number of unexercised options, if any, held at March 2, 1999 and the value of unexercised "in-the-money" options at December 31, 1998 which options do not include the options granted on March 1, 1999. The total number of unexercised options shown in the table reflect option grants for 1998 which were approved by the Board on March 2, 1999. The value realized on exercise is the difference between the closing price of the underlying common shares on the exercise date and the exercise price of the option. The value of unexercised "in-the-money" options at the financial year end is the difference between the exercise price and the closing price of $22.45 per share of TransCanada's common shares on The Toronto Stock Exchange on December 31, 1998. These amounts, unlike the amounts shown in the column "Aggregate Value Realized", have not been and may never be realized. The underlying options have

not been and will not necessarily be exercised and the actual gains, if any, on exercise will depend on the value of TransCanada's common shares on the date of exercise.

Name	Common Shares Acquired on Exercise (#)	Aggregate Value Realized ($)	Unexercised Options at March 2, 1999 (#)[1]		Value of Unexercised in-the-Money Options at December 31, 1998 ($)[1]	
			Exercisable	Unexercisable	Exercisable	Unexercisable
G.W. Watson	10,000	156,750	405,882	170,448	2,326,386	51,805
B.W. Simpson	158,894	1,145,405	41,311	26,250	0	0
S.J.J. Letwin	0	0	82,832	68,854	245,290	22,386
R.J. Reid	9,058	100,680	174,607	58,208	1,045,308	22,386
G.P. Mihaichuk	0	0	122,840	68,854	514,886	22,386

Note:

(1) *Value of in-the-money options at December 31, 1998 does not include options granted on March 1, 1999 because they were not granted at that time and are not currently in-the-money in any event.*

Indebtedness of Directors, Executive Officers and Senior Officers

As at March 2, 1999, the aggregate amount of indebtedness to TransCanada incurred by all directors, officers, employees and former directors, officers and employees of TransCanada or any of its subsidiaries amounted to $3,037,476.

The following table sets forth the indebtedness incurred by directors, executive officers and senior officers to TransCanada or any of its subsidiaries.

Name and Principal Position	Involvement of Issuer or Subsidiary	Largest Amount Outstanding During the Financial Year Ended December 31, 1998[1] ($)	Amount Outstanding as at March 2, 1999 ($)
W. Mirosh Senior Vice-President, Business Development and Corporate Strategy	TransCanada as Lender	100,000	55,000

Note:

(1) *Mr. Mirosh was advanced $235,000 on April 12, 1994 in accordance with the terms of his employment agreement dated March 22, 1993 at which time he was hired as the President of Alberta Natural Gas Company Ltd., a subsidiary which has since amalgamated with the Company. Minimum annual loan repayments of $45,000 commenced March 1995 and were paid by Mr. Mirosh pursuant to the terms of a promissory note on the last day of March in 1996, 1997 and 1998 with the balance to be repaid in full by March 31, 1999. The loan bears an interest rate of 7% per annum compounded annually which is paid by Mr. Mirosh through payroll deduction. In the event that Mr. Mirosh ceases to be employed by the Company for any reason, the outstanding balance on the loan becomes immediately repayable.*

Pension and Retirement Benefits

The Named Executive Officers and all other employees participate in the Company's non-contributory pension plans (the "Pension Plans").

Under the Company's Registered Pension Plan (the "RPP"), except as discussed below for former NOVA employees, employees are offered the following three options:

(a) A Defined Benefit Plan (the "DB Plan") under which the annual pension plan benefits are integrated with Canada Pension Plan benefits and are based on: 1.25% of a person's final average pensionable earnings up to the Average Maximum Pensionable Earnings; plus 1.75% of a person's final average pensionable earnings in excess of the Average Maximum Pensionable Earnings; multiplied by the total number of years credited in the RPP ("Credited Pensionable Service"). Final average pensionable earnings are defined as the average annual pensionable earnings during the 36 consecutive months

when earnings were highest. Average Maximum Pensionable Earnings are defined as the three-year average of the year's Maximum Pensionable Earnings as determined in accordance with the *Canada Pension Plan Act*. (capitalized terms are defined below)

(b) A Defined Contribution Plan (the "DC Plan") under which 6% of pensionable earnings are contributed annually by the Company to the employee's pension plan; and

(c) A Combined Plan (the "Combined Plan") which is a combination of the DB Plan and the DC Plan under which benefits are based on 0.75% of a person's Credited Pensionable Service together with Company contributions to the DC Plan in the amount of 3% per annum.

Pension plan benefits are subject to a ceiling imposed by the *Income Tax Act* (Canada) of $1,722 per year for each year of Credited Pensionable Service, with the result that benefits cannot be earned on salary above approximately $109,000 per annum.

Under the Executive Supplemental Pension Plan (the "ESPP") which was amended in 1994, 1996 and 1997, officers of the Company are entitled to supplementary pension benefits. In respect of credited service prior to May 1990, for officers who were members of the executive plan in May 1990, the annual pension benefit is equal to 3.33% of final average plan earnings for each of the first 15 years of service with the Company and 2% for each of the next 10 years. These pension benefits are inclusive of benefits payable under the RPP and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to those employees with credited service granted prior to May 1990 under the ESPP is 70% of final average pensionable earnings at the date of retirement, less the amount payable under the Canada Pension Plan. In respect of credited service on and after May 1990, the annual pension benefit is equal to the amount calculated using the formula contained in the ESPP without reference to the ceiling imposed by the *Income Tax Act* (Canada) or the pensionable earnings limit referred to above.

Under the Supplemental Pension Plan ("SPP"), which is available to senior employees who are not officers of the Company, an accrued pension in excess of the Revenue Canada maximum will be paid to such employees in the form of monthly income upon retirement.

Under the DB Plan, the DC Plan, the ESPP, and the SPP, a participant will receive the following automatic form of pension:

(a) in respect of credited service prior to January 1, 1990, upon retirement, a monthly pension payable for life with 60% continuing to the participant's surviving spouse; and

(b) in respect of credited service on and after January 1, 1990, upon retirement, a monthly pension as described in (a) above, and for unmarried participants or married participants who have so elected and with spousal consent have waived the automatic form of pension, a monthly pension payable for life with payments to the participant's estate guaranteed for the balance of 10 years if the participant dies within 10 years of retirement.

In lieu of the automatic form of pension, a participant may elect optional forms of pension payment.

Employees who, as a result of the arrangement between TransCanada and NOVA, became employees of TransCanada, participate in the RPP and the ESPP or the SPP. The benefit payable, however, is calculated in accordance with the provisions of NOVA's Retirement Plan for Western Canadian Salaried Employees (the "NOVA Plan") and prior NOVA supplementary pension agreements.

The NOVA Plan is a defined benefit plan. The benefit formula is integrated with the Canada Pension Plan. The non-contributory future service benefit is equal to the sum of A plus B where:

A is 1% times credited service times the lesser of:

(i) Highest Average Earnings (defined below); and

(ii) Average Maximum Pensionable Earnings (defined below)

B is 1.6% times credited service times the amount, if any, by which the Highest Average Earnings exceeds the Average Maximum Pensionable Earnings.

Highest Average Earnings is the average of the highest 36 consecutive months of base salary in the last ten years and Average Maximum Pensionable Earnings is the three year average of the year's Maximum Pensionable Earnings as determined in accordance with the *Canada Pension Plan Act*. Management incentive payments are not included in base salary for the purpose of determining pension benefits.

Pension benefits for (a) married retirees are payable for life and, upon death, consist of 60% of the retiree's benefit payable to the surviving spouse for life, and (b) single retirees are payable for life and are guaranteed for 5 years from the date the pension commences.

Pension benefits are not subject to any deduction for social security or other offset amounts.

Assuming that the executive officers named below remain employed by the Company until age 65 and that the RPP and the ESPP remain in force substantially in their present forms, such officers will have approximately the following listed number of years of Credited Pensionable Service: G.W. Watson — 22 years; B.W. Simpson — 37 years; S.J.J. Letwin — 25 years; R.J. Reid — 40 years; and G.P. Mihaichuk — 23 years.

The following tables separately set out for TransCanada officers firstly and then previous NOVA officers, the estimated annual DB Plan benefits (based on the "joint and 60% survivor" method) payable for credited service under the DB Plan and the ESPP (excluding amounts payable under the Canada Pension Plan) in specified final average pensionable earnings and years of Credited Pensionable Service classifications:

TransCanada

Final Average Pensionable Earnings(1)	Years of Credited Pensionable Service(2)					
	15	20	25	30	35	40
$ 200,000	$ 50,000	$ 66,000	$ 83,000	$ 99,000	$116,000	$133,000
300,000	76,000	101,000	127,000	152,000	177,000	203,000
400,000	102,000	136,000	170,000	204,000	238,000	273,000
500,000	128,000	171,000	214,000	257,000	300,000	343,000
600,000	155,000	206,000	258,000	309,000	361,000	413,000
700,000	181,000	241,000	302,000	362,000	422,000	483,000
800,000	207,000	276,000	345,000	414,000	483,000	553,000
900,000	233,000	311,000	389,000	467,000	545,000	623,000
1,000,000	260,000	346,000	433,000	519,000	606,000	693,000
1,200,000	312,000	416,000	520,000	624,000	728,000	833,000

Notes:

(1) *Final average pensionable earnings include base salary and targeted incentive payments under ICP for officers and actual ICP to the targeted percentage for other employees.*

(2) *Amounts are rounded to the nearest one thousand dollars.*

Former NOVA

Final Average Pensionable Earnings	Years of Credited Pensionable Service[1]					
	15	20	25	30	35	40
$ 200,000	$ 45,000	$ 60,000	$ 74,000	$ 89,000	$104,000	$119,000
300,000	69,000	92,000	114,000	137,000	160,000	183,000
400,000	93,000	124,000	154,000	185,000	216,000	247,000
500,000	117,000	156,000	194,000	233,000	272,000	311,000
600,000	141,000	188,000	234,000	281,000	328,000	375,000
700,000	165,000	220,000	274,000	329,000	384,000	439,000
800,000	189,000	252,000	314,000	377,000	440,000	503,000
900,000	213,000	284,000	354,000	425,000	496,000	567,000
1,000,000	237,000	316,000	394,000	473,000	552,000	631,000
1,200,000	285,000	380,000	474,000	569,000	664,000	759,000

Note:

(1) *Amounts are rounded to the nearest one thousand dollars.*

A common set of pension plan options will be made available to all employees during the course of 1999, to be effective in 2000.

Employment Contracts

TransCanada has entered into an agreement with Mr. Watson and has assumed an agreement that Mr. Simpson had with NOVA prior to the arrangement. Under Mr. Watson's agreement, Mr. Watson has agreed not to voluntarily leave his employment with the Company during a proposed change of control of the Company. In the event of a change of control of the Company and the involuntary termination or constructive dismissal of Mr. Watson, he is entitled to receive a payment equal in amount to 36 months of Mr. Watson's salary, benefits and other compensation. A portion of such amount will be in consideration of a non-competition agreement which Mr. Watson granted in favour of the Company and which prohibits Mr. Watson from being involved with a North American business or a business with principal activities in Canada which is substantially similar to TransCanada's business for a period of eighteen months from his voluntary termination or constructive dismissal following a change of control. Under Mr. Simpson's agreement, in the event Mr. Simpson is terminated through a change of control, or without cause, or if he voluntarily resigns after June 30, 1999, he is entitled to receive a payment equal in amount to 24 months of Mr. Simpson's salary, benefits and other compensation and an incentive compensation payment equal to two times the average of what he has received over the last three years of his employment.

Composition of the Human Resources Committee

The Human Resources Committee of the Board of Directors (the "Committee") is composed of six directors, A.R. Taylor, J.G. Day, W. Dobson, K.L. Hawkins, H.N. Hotchkiss and C.E. Ritchie, who are neither officers nor former officers of the Company. The Committee is charged with the mandate described under "Other Information — Corporate Governance — Human Resources Committee". The Committee reports to the Board of Directors all material matters considered and approved by it.

Report on Executive Compensation

When determining the level of executive compensation, the Committee utilizes data prepared by independent compensation consultants. Competitive compensation data for a comparator group comprised of approximately 26 large Canadian public companies is referenced. These companies are of similar size and complexity to the Company and are representative of the types of organizations with which the Company must compete for its executive officers.

The main objectives of the compensation program for the executive officers of the Company are:

- to attract, retain and appropriately motivate the highly qualified workforce necessary to achieve the Company's annual and longer-term business objectives; and
- to reinforce the commitment of the executive officers to maximize shareholder value.

In order to achieve these objectives, the total compensation program for executive officers has four components, all of which are performance-based:

- base salary;
- an annual incentive program in the form of cash payments, described above under "Description of Plans — Incentive Compensation Program";
- a long-term equity-based incentive plan, described above under "Description of Plans — Key Employee Stock Incentive Plan"; and
- a long-term, equity-related cash incentive plan, described above under "Description of Plans — Performance Unit Plan".

When determining how the Company's compensation program compares against the competitive compensation data, the Committee considers it appropriate that considerable emphasis should be placed on actual performance achievements as measured against pre-established corporate and business unit goals, as well as individual executive officer performance management objectives.

Base Salaries

Base salaries for executive officers are paid within salary levels established for each position on the basis of the level of responsibility. The executive salary levels are determined through annual compensation surveys of our comparator group. Individual salaries within a level are determined by that officer's contribution to the Company.

Annual Incentive Compensation Plan (ICP)

The ICP is designed to link the total cash compensation levels to the achievement of corporate, business unit and individual goals. The plan provides for annual cash awards based on corporate and business unit performance and individual contribution to TransCanada's results, measured against objectives that are determined at the beginning of each year. For 1999, the executive officers have several common objectives including financial targets for TransCanada, strategy development and implementation, safety and environmental measures, Year 2000 compliance, and leadership development.

If minimum performance levels are not reached, no incentive is payable. If target performance levels are reached, the target incentive award is payable. Provision is made in the plan to pay incentives in excess of the target award, to a maximum established by the Board, if performance in a year is exceptional. The factor by which the incentive award is calculated is pro-rated between the minimum, target and maximum award depending on actual performance under each of the components. All awards are subject to the review and approval of the Human Resources Committee of the Board.

Key Employee Stock Incentive Plan

The Company's long-term incentive plan, KESIP (1995), is the third performance-based component of the executive group's total compensation program. KESIP (1995) is intended to reinforce executive officer commitment to the long-term growth in profitability and shareholder value by including stock options in the total compensation program. The size of the annual stock option awards to individual executive officers is determined by considering individual performance, level of responsibility, authority and overall importance to the current welfare of the Company, and the degree to which their long-term potential and contribution will be key to the long-term success of the Company. The Human Resources Committee has flexibility in the determination of the size of the grant and, when making its decisions, takes into account all relevant

circumstances including the value of the Company's stock option grants in comparison with its competitors. In the case of stock options, executive officers benefit only if the market value of the stock subject to the option at the time of exercise is greater than that at the time of the award.

Performance Unit Plan

To further strengthen the alignment of the executive group's financial interests with those of the shareholders, the Board approved the adoption of PUP, effective in 1995. On the same date as the Committee determines the number of stock options to be awarded under the terms of KESIP (1995), it also may determine an equivalent number of units be granted under PUP. Each unit has the potential to accrue annually a cash amount up to or equal to the dividends paid on a common share in a financial year. The purpose of PUP is to tie a portion of executive compensation to the Company's performance in relation to total shareholder value through share price appreciation and dividend payments.

Total Compensation

If the corporate and individual executive officer performance targets are met, and assuming stock growth and dividend payment assumptions are correct for the KESIP (1995) and PUP components, it is intended that the total executive officer compensation program comprised of the base salary, ICP, and the long-term KESIP (1995) and PUP programs would enable total compensation to be paid at the 75th percentile of competitive compensation. The more senior the executive officer, the more closely compensation is tied to the actual performance of the Company. Accordingly, a higher proportion of the total compensation package is at risk under the ICP, KESIP (1995) and PUP programs for the executive officers.

Compensation of the Chief Executive Officer

Mr. Watson's compensation program has the same components as those described for the other members of the executive officer group: base salary, ICP and the long-term KESIP (1995) and PUP programs. Mr. Watson's compensation is established with reference to the same comparator group described above. The Committee makes recommendations to the Board regarding Mr. Watson's compensation on the same performance-related basis as for the other executive officers. Under ICP, 50% of his award is directly related to achieving pre-established quantitative and qualitative corporate objectives and 50% is dependant on his defined individual achievements. In 1998, Mr. Watson's annual base salary was $614,000. An ICP payment of $625,000 was awarded to Mr. Watson for 1998. In addition, an award of 135,000 stock options was made to Mr. Watson under KESIP (1995). The ICP and the KESIP (1995) award levels recognize Mr. Watson's contribution to the Company's performance in 1998, his role in negotiating the arrangement with NOVA and the significant progress made in 1998 in achieving the expected benefits of the arrangement with NOVA. The KESIP (1995) award level is intended to reflect this level of performance in a one time award. Previously awarded units under PUP accrued a potential future cash value of $350,117 in 1998.

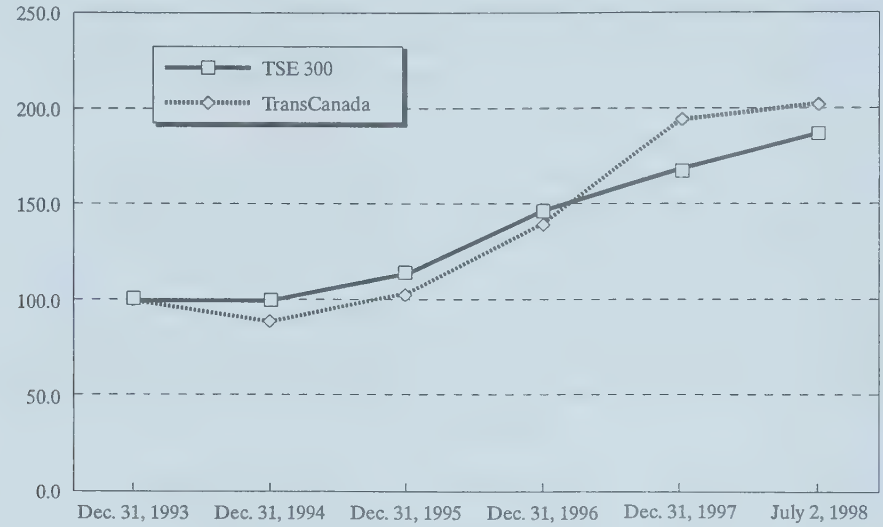
Submitted by the Human Resources Committee of the Board of Directors:

A.R. Taylor (Chair)
J.G. Day
W. Dobson

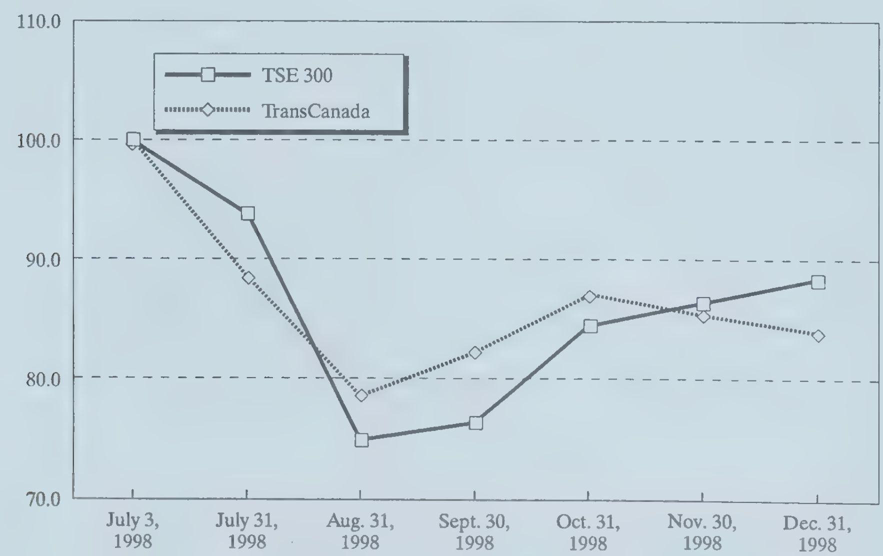
K.L. Hawkins
H.N. Hotchkiss
C.E. Ritchie

Performance Graphs

The following graphs compare TransCanada's five year cumulative total shareholder return to the TSE 300 composite index. The first graph is for the period before the arrangement with NOVA. It reflects a $100 investment on December 31, 1993 and assumes reinvestment of dividends until July 2, 1998, the period before the arrangement with NOVA. The second graph assumes a $100 investment on July 3, 1998 and assumes reinvestment of dividends for the balance of the year. The two graphs are required in order to reflect the issuance on July 2, 1998 of approximately 235 million TransCanada common shares pursuant to the terms of the arrangement.



	Dec. 31, 1993	Dec. 31, 1994	Dec. 31, 1995	Dec. 31, 1996	Dec. 31, 1997	July 2, 1998	Compound Annual Growth
TransCanada	100.0	89.5	104.2	139.6	194.0	202.8	15.19%
TSE 300	100.0	99.8	114.3	146.7	168.7	187.0	13.34%



	July 3, 1998	July 31, 1998	Aug. 31, 1998	Sept. 30, 1998	Oct. 31, 1998	Nov. 30, 1998	Dec. 31, 1998
TransCanada	100.0	88.5	78.7	82.3	87.2	85.5	83.99
TSE 300	100.0	93.9	75.0	76.4	84.5	86.5	88.55

3. Appointment of Auditors

The Board of Directors recommends that KPMG LLP, Chartered Accountants, be reappointed as the Company's auditors to hold office until the close of the next annual meeting and that the directors be authorized to fix their remuneration as such. KPMG LLP have served as the auditors of the Company since 1956.

Representatives of KPMG LLP will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

4. Amendments to By-law Number 1

By resolution approved on February 2, 1999, the Board of Directors passed certain amendments to the Company's By-law Number 1. Although such amendments were effective upon passage by the Board of Directors, the amendments are subject to shareholder confirmation. As a result, shareholders will be asked at the Meeting to consider, and if deemed advisable, to confirm, by simple majority of votes cast at the Meeting, the amendments to By-law Number 1. The effect of the amendments is as follows:

(a) to allow the Company to operate on a divisional or business unit basis;

(b) to provide that the chief executive officer may designate assistant corporate secretaries, treasurers or controllers as well as divisional or business unit presidents and vice-presidents. Divisional officers so appointed would not be officers of the Company unless so designated by the Board of Directors;

(c) to provide the authority to the chief executive officer to designate divisional or business unit officers or managers to execute instruments on behalf of divisions and business units; and

(d) to correct an oversight in the By-law that had previously not specifically included the chief executive officer as a named signing officer of the Company.

Extracts of By-law Number 1, as amended, are set out in Appendix A to this Circular.

The Board of Directors has determined that the proposed amendments to By-law Number 1 are in the best interests of the Company and its shareholders. Accordingly, the Board of Directors recommends that the shareholders vote in favour of confirming the amendments. The resolution requires approval of the confirmation by not less than 50 per cent of the votes cast in order to be effective. In the event that an insufficient number of votes are cast to confirm the amendments, the By-law will revert back to the language as originally approved.

5. Amendment to Articles Facilitating the Appointment of Additional Directors

The shareholders will be asked at the Meeting to consider and, if deemed advisable, to pass a special resolution, the text of which is set forth in Appendix B to this Circular (the "Special Resolution") authorizing the Company to apply for a Certificate of Amendment amending the Company's Articles in order to permit the Board of Directors to appoint up to two additional directors to the Board in accordance with subsection 106(8) of the *Canada Business Corporations Act* ("CBCA"). Currently the Company's Articles do not contain such a provision. It would be appropriate for the Company to provide for the flexibility permitted by the CBCA. Although the CBCA permits articles to be amended to allow Boards to appoint additional directors between shareholders' meetings to a maximum of ⅓ of the number of directors elected by the shareholders at the previous annual meeting, it was felt that an amendment to the Articles providing for the appointment of up to two new directors would be sufficient. The Board believes that the proposed amendment would provide it ample flexibility to appoint qualified individuals during the period between shareholders' meetings when such individuals become available and thus allow the Company to benefit immediately from the contributions of such persons without having to wait for the next annual shareholders' meeting or incur the expense of a special shareholders' meeting. Any director so appointed would have a term ending at the next annual meeting of shareholders.

The Board of Directors believes that the proposed amendment to the Articles is in the best interests of the Company and its shareholders. Accordingly, the Board of Directors recommends that the shareholders vote in favour of the Special Resolution. The Special Resolution requires the approval of not less than 66⅔ per

cent of the votes cast in order to be adopted. In the event that an insufficient number of votes are cast to approve the Special Resolution, the Articles, as they now exist, will remain unchanged with respect to the appointment of additional directors to the Board.

Other Information

Corporate Governance

TransCanada's board of directors (the "Board") and the members of TransCanada's management are committed to a high standard of corporate governance. TransCanada's corporate governance practices comply with the Guidelines for Improved Corporate Governance adopted by The Toronto Stock Exchange ("TSE") and the Montreal Exchange. The Company's principal objective in directing and managing its business and affairs is to enhance shareholder value. The Company believes that effective corporate governance improves corporate performance and benefits all shareholders.

The by-laws of the TSE and the policy statement of the Montreal Exchange require that companies listed thereon disclose on an annual basis their approach to corporate governance as it relates to the guidelines for effective Corporate Governance adopted by these exchanges and which were first outlined in the Report of The Toronto Stock Exchange Committee on Corporate Governance in Canada (the "TSE Report").

The following addresses the principal matters relating to TransCanada's corporate governance practices as required by the TSE and the Montreal Exchange. It has been approved by the Governance Committee of the Board and by the Board as a whole. The Board has also approved corporate governance guidelines that set out in detail TransCanada's governance regime. A copy of these guidelines are available on request by contacting the Corporate Secretary at the Company's corporate office in Calgary.

Mandate of the Board

TransCanada's Board has ultimate responsibility for the overall stewardship of the Company. Day-to-day management is the responsibility of the chief executive officer (the "CEO") and senior management.

The Board discharges its responsibilities directly and through committees. At regularly scheduled meetings, members of the Board and management discuss a broad range of issues relevant to the Company's strategy and business interests. The Board also receives reports from management on the Company's operational and economic performance.

Strategies, business plans, corporate policies, financings, human resource programs and succession plans are items proposed by management for consideration and, if appropriate, approved by the Board. In addition, reports of board committees are received and considered.

To fulfil its obligations, the Board approves an annual schedule of management presentations for Board and committee meetings. Materials are delivered in advance to the directors for all meetings in order to facilitate informed discussion and decision making. The Board has nine scheduled meetings each year and unscheduled meetings are held from time to time as required. There were sixteen meetings of the Board in 1998.

Composition of the Board

The Board is currently composed of 17 directors; six directors will retire at the Meeting and three new candidates will be nominated at the Meeting. Thus, subject to their election, there will be 14 members of the Board for the balance of 1999. One director, Mr. Watson, is the CEO of the Company. Another current director, Mr. Maier, is a former officer of the Company. Mr. Maier will be retiring at the 1999 annual meeting. The Board believes that all 15 of the other current directors and the three new nominees for director are "unrelated" directors, as that term is used in the TSE Report. Each of them is independent of management, none has any interest, business or other relationship that could or could reasonably be perceived to materially interfere with his or her ability to act in the best interests of the Company and, except for the Chair and Vice-Chair, none has received remuneration from TransCanada in excess of directors' fees.

Independent Functioning of the Board

The chair of the Board ("Chair") is a separate position from the CEO. The Chair is appointed by the Board in a non-executive capacity. In the event that a Chair is appointed in an executive capacity, the Board will appoint an unrelated director to serve in the capacity of "Lead Director" whose responsibility would be to ensure the Board can function independently of management. The Board has a significant majority of unrelated directors. The agendas of the Board are set by management in consultation with the Chair who co-ordinates with the Board as a whole. The Chair of each committee also co-ordinates the agendas for each Committee with relevant management and the committee members. Any two directors may call a meeting of the Board or a committee of which the two directors are members. The directors periodically meet in the absence of the CEO and other members of management. Individual directors may engage outside advisors in appropriate circumstances with the authorization of the Governance Committee. The effectiveness of the Board, its committees and the performance of individual members of the Board are assessed annually by the Governance Committee. The Governance Committee considers directors' comments and suggests changes to improve the governance processes.

The Board's Expectations of Management

The Board's expectations of management have been formally incorporated into the Terms of Reference for the position of President and CEO. The Board believes management is responsible for the effective, efficient and prudent management of the Company's day-to-day operations subject to the Board's stewardship. This management responsibility includes the implementation of the approved strategic plan within authorized budgets and in compliance with the Code of Business Ethics and the Company's policies and procedures. Additionally, management is expected to fully inform the Board on the business and affairs of the Company, to develop and maintain a sound, effective organizational structure and to ensure capable management succession and progressive employment training and development programs.

Description of the Board Committees and their Mandates

The Board has established five committees: the Audit and Risk Management Committee; the Executive Committee; the Governance Committee; the Health, Safety and Environment Committee; and the Human Resources Committee. All committees have a majority of members who are unrelated directors and, in the case of the Health, Safety and Environment Committee, the Human Resources Committee and the Audit and Risk Management Committee, all members are unrelated directors. Upon Mr. Maier's retirement from the Board on April 30, 1999, all members of all committees, except the Executive Committee, will be unrelated.

Audit and Risk Management Committee

This Committee reviews the Company's audited consolidated financial statements and selected corporate disclosure documents including the annual report, the annual information form, all prospectuses and other offering memoranda, and any financial statements required by regulatory authorities before they are approved by the Board. It approves the public release of quarterly financial results, monitors accounting, financial reporting, control and audit functions, reviews risk management policies and reviews issues relating to legal and regulatory responsibilities to ensure compliance. The Committee reviews the audit plans of the internal and external auditors and meets with them, in each case independently of other management. It reviews and reports to the Board on the Company's risk management policies and procedures and reviews the internal control procedures to determine their effectiveness and to ensure compliance with the Company's policies, and avoidance of conflicts of interest.

Chair: H.P. Milavsky
Members: R.B. Coleman, K.L. Hawkins, J.J. Healy, J.M. MacLeod, J.R. Paul, H.G. Schaefer, J.D. Thompson

Executive Committee

This Committee's mandate is to exercise powers of the Board with certain exceptions prescribed by law as may be specifically directed by the Board or where expedient action is required in circumstances where holding a board meeting is not practicable. The Committee is also mandated to meet with the CEO to discuss significant policy issues, business plans, budgets, acquisitions and divestitures.

Chair: R.F. Haskayne
Members: H.N. Hotchkiss, D.S. Macdonald, G.J. Maier, C.E. Ritchie, H.G. Schaefer, A.R. Taylor

Governance Committee

This Committee's mandate is to enhance the Company's governance through a continuing assessment of TransCanada's approach to corporate governance. The Committee is responsible for recommending to the Board candidates for nomination as directors, the composition of the various Board committees and reviews and recommends compensation for Board and Committee service. The Committee also reviews the performance of directors and the Board, monitors the relationship between management and the Board, and reviews the Company's structures to ensure that the Board is able to function independently of management. It is also mandated to undertake initiatives as are needed to help deliver pre-eminent corporate governance.

Chair: H.G. Schaefer
Members: J.G. Day, W. Dobson, G.J. Maier, J.R. Paul

Health, Safety and Environment Committee

This Committee was established in July 1998. Prior to that time, Health, Safety and Environment matters were dealt with by the Audit and Environment Committee. The Committee's mandate is to monitor the health, safety and environmental practices and procedures of the Company and its subsidiaries in an effort to ensure compliance with applicable legislation and industry standards and to prevent or mitigate losses. The Committee also considers whether the implementation of the Company's policies related to health, safety and environmental matters is effective. It reviews, reports and, when appropriate, makes recommendations to the Board on the Company's policies and procedures related to health, safety and the environment. The Committee meets separately with relevant officers of the Company and its business units who have responsibility for these matters and reports to the Board on such meetings.

Chair: J.M. MacLeod
Members: R.B. Coleman, J.J. Healy, D.S. Macdonald, H.P. Milavsky, J.D. Thompson

Human Resources Committee

This Committee reviews human resource policies and plans, monitors succession planning, assesses the performance of the Chair and the CEO and other senior officers of the Company and its major subsidiaries against set objectives and approves the salary and other remuneration to be awarded to senior executive officers of the Company and its major subsidiaries. The Committee reports to the Board with recommendations on the remuneration package for the Chair and the CEO. It approves the executive compensation plans as well as approving any major changes to compensation and benefit plans generally including the pension plans, and it administers KESIP (1995), including the granting of options under the plan.

Chair: A.R. Taylor
Members: J.G. Day, W. Dobson, K.L. Hawkins, H.N. Hotchkiss, C.E. Ritchie

Chair's Participation in Committees

Other than with respect to the Executive Committee, on which he is a voting member and the Chair, Mr. Haskayne is a non-voting member of all of the Committees.

Directors' and Officers' Liability Insurance

The Company maintains Directors' and Officers' Liability Insurance with policy limits of US $150 million in the aggregate, subject to a deductible in respect of corporate reimbursement of US $250,000 for each loss. Generally, under this insurance, the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Major exclusions from coverage include claims arising from illegal acts, those acts which result in illegal personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions) and claims brought by a director or officer against another director or officer or by the Company against a director or officer except for shareholder derivative actions. For the year ended December 31, 1998, the total annual premium in respect of such insurance was $654,266 which was paid entirely by the Company. Of this amount, an estimated $264,822 was paid in respect of directors as a group and $389,444 was paid in respect of officers as a group.

Shareholder Proposals

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 2000 annual meeting of holders of common shares of the Company (expected to be held in April 2000) must be received by the Corporate Secretary of the Company on or before the close of business on January 28, 2000.

Directors' Approval

The contents of this Circular and the sending of it to each shareholder entitled to receive notice of the Meeting, to each director, to the auditors of the Company and to the appropriate governmental agencies, have been approved by the Board of Directors of the Company.

Certificate

The foregoing contains no untrue statement of material fact and does not omit to state a material fact that is required to be stated or that is necessary to make a statement not misleading in the light of the circumstances in which it was made.

George W. Watson
President and Chief Executive Officer

Stephen J.J. Letwin
Senior Vice-President, Corporate Services and Chief Financial Officer

Dated at Calgary, Alberta
March 2, 1999

APPENDIX A

TransCanada PipeLines Limited
Amended Sections of By-law Number 1

5.02 Chief Executive Officer

The board shall designate an officer as the chief executive officer. The chief executive officer shall have the general supervision of the business and affairs of the Company, subject to the direction of the board. In addition the chief executive officer shall have the power to appoint an assistant controller, an assistant treasurer, an assistant corporate secretary and such division or business unit presidents and/or division or business unit vice-presidents and such other divisional or business unit officers as the chief executive officer considers appropriate. Any such division or business unit presidents and division or business unit vice-presidents are not, and shall not be, unless otherwise designated by the Board, officers of the Corporation.

11.03 Execution of Instruments

Contracts, documents or other instruments requiring execution by the Company may be signed by one of the chairman, vice-chairman, if any, the chief executive officer, the president or any vice-president, together with any one of the foregoing or with the corporate secretary or an assistant corporate secretary, assistant controller or assistant treasurer. The board may appoint any other person or persons to sign instruments generally or specific instruments. In absence of any specific board authority, the chief executive officer, as to any instruments pertaining solely to a division, business unit or sub-unit, may designate any two divisional or business unit officers or managers to execute instruments, either generally or specifically, on behalf of such division or business unit.

SECTION TWELVE

DIVISIONS AND BUSINESS UNITS

12.01 Creation and Consolidation of Divisions and Business Units

The Board may cause the business and operations of the Company or any part thereof to be divided or to be segregated into one or more divisions or business units upon such basis, including without limitation, character or type of operation, geographical territory, product manufactured or service rendered, as the Board may consider appropriate in each case. The Board may also cause the business and operations of any such division or business unit to be further divided into sub-units and the business and operations of any such divisions, business units or sub-units to be consolidated upon such basis as the Board may consider appropriate in each case.

12.02 Name of Division or Business Unit

Any division, business unit or their sub-units may be designated by such name as the Board may from time to time determine and may transact business, enter into contracts, sign cheques and other documents of any kind and do all acts and things under such name. Any such contract, cheque or document shall be binding upon the Company when signed in accordance with Section 11.03 as if it had been entered into or signed in the name of the Company.

APPENDIX B

TransCanada PipeLines Limited
Special Resolution

BE IT RESOLVED AS A SPECIAL RESOLUTION THAT:

Pursuant to section 106(8) of the *Canada Business Corporations Act*, the Company is hereby authorized to apply for a certificate of amendment under section 173 of the *Canada Business Corporations Act* to amend its articles by adding the following paragraph to the end of Item 7:

> "In addition to any power the directors may have pursuant to the *Canada Business Corporations Act* to fill vacancies among their number, but subject to the maximum number of directors provided for in the articles, the directors may appoint up to two additional directors, who shall hold office for a term expiring not later than the close of the next annual meeting of shareholders, provided such appointments shall not exceed one-third of the number of directors elected at the previous annual meeting of shareholders."

The Management Proxy Circular dated May 19, 1998 for the Company's last annual meeting has been filed with the securities commissions or similar authorities in Canada. The Annual Information Form of the Company for the year ended December 31, 1998, dated March 2, 1999, will be filed prior to March 29, 1999 with the securities commissions or similar authorities in Canada, and under cover of Form 40-F/A with the U.S. Securities and Exchange Commission. The 1999 Management Proxy Circular and the Annual Information Form for the year ended December 31, 1998 will be available on or about March 29, 1999 (without charge to holders of common shares of the Company) upon request to the Corporate Secretary and Associate General Counsel, Corporate, TransCanada PipeLines Limited, P.O. Box 1000, Station "M", Calgary, Alberta, T2P 4K5.

Canadian Mail Service Interruption: If there is a mail service interruption in Canada prior to mailing by a shareholder of a completed proxy to TransCanada's transfer agent, Montreal Trust, it is recommended that the shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of Montreal Trust:

Alberta
530 - 8th Avenue S.W., Suite 600
Calgary

British Columbia
510 Burrard Street, 2nd Floor
Vancouver

Saskatchewan
1783 Hamilton Street, Suite 660
Regina

Manitoba
200 Portage Avenue
Winnipeg

Ontario
151 Front Street, W., 8th Floor
Toronto

Québec
1800 McGill College Avenue, 6th Floor
Montréal

Nova Scotia
1465 Brenton Street, 5th Floor
Halifax

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TransCanada

TransCanada
PipeLines
Limited

Notice of 2000
Annual Meeting
of Shareholders
and Management
Proxy Circular

February 29, 200

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TransCanada

Dear Shareholder:

You are invited to attend the Annual Meeting of the common shareholders of TransCanada PipeLines Limited which will be held at the Hilton Montreal Bonaventure, 1, Place Bonaventure, Montréal, Québec on Friday, April 28, 2000 at 10:30 a.m. (Eastern Daylight time).

The items of business to be acted on by shareholders are set forth in the notice of meeting and management proxy circular. Your participation in this meeting is very important to TransCanada, regardless of the number of shares you hold. If you are unable to attend in person, please complete, date, sign and promptly return the enclosed form of proxy in the envelope provided for this purpose. If you intend to be present at the meeting, you may nevertheless find it convenient to express your views in advance by returning the form of proxy duly completed.

Proxies are counted and tabulated by Montreal Trust Company of Canada, the transfer agent of TransCanada, in such a manner as to preserve the confidentiality of individual shareholder votes, except (a) where the shareholder has made a written comment on the proxy form which is clearly intended for management, (b) as necessary to meet legal requirements or (c) in the event of a proxy contest.

We will review with you the business and affairs of TransCanada and our outlook for the future at the conclusion of the meeting.

Sincerely yours,

Douglas D. Baldwin
President and Chief Executive Officer

February 29, 2000

Your vote is very important. The board of directors urges you to complete, date, sign and return today the enclosed proxy in the enclosed envelope. If your shares are held in the name of a broker or nominee, you must provide voting instructions to the broker or nominee in order for your shares to be represented at the annual meeting. For assistance or further information, please call

TransCanada's Investor Relations Department
toll-free at 1-800-361-6522 or call
Montreal Trust (403) 267-6555 or 1-888-267-6555

TransCanada

TransCanada PipeLines Tower
111 - Fifth Avenue S.W.
Calgary, Alberta
Canada T2P 3Y6

NOTICE OF ANNUAL MEETING

NOTICE IS HEREBY GIVEN that the Annual Meeting (the "Meeting") of the holders of common shares (the "common shares") of TransCanada PipeLines Limited ("TransCanada" or the "company") will be held at the Hilton Montreal Bonaventure, 1, Place Bonaventure, Montréal, Québec on Friday, April 28, 2000 at 10:30 a.m. (Eastern Daylight time) for the following purposes:

(1) to receive the consolidated financial statements for the year ended December 31, 1999 and the auditors' report thereon;

(2) to elect directors;

(3) to appoint auditors and authorize the directors to fix their remuneration as such; and

(4) to transact such other business as may properly come before the Meeting or any adjournment thereof.

Holders of common shares are invited to attend the Meeting. Shareholders of record at the close of business on March 10, 2000 will be entitled to vote at the Meeting unless a shareholder has transferred shares after that date and the new holder of such shares establishes proper ownership and requests, not later than the close of business on April 18, 2000, to be included in the list of shareholders eligible to vote at the Meeting.

Shareholders are requested to complete, date, sign and return (in the envelope provided for that purpose) the accompanying form of proxy for use at the Meeting. To be used at the Meeting, proxies must be received before 4:30 p.m. (Mountain Daylight time) on Wednesday, April 26, 2000 by TransCanada's transfer agent, Montreal Trust Company of Canada, Stock Transfer Services, 600, 530 - 8th Avenue S.W., Calgary, Alberta, Canada, T2P 3S8.

The 1999 Annual Report, the Management Proxy Circular and a form of proxy accompany this Notice of Meeting.

By Order of the Board of Directors,

Rhondda E.S. Grant
Vice-President and Corporate Secretary

Calgary, Alberta
February 29, 2000

TransCanada

MANAGEMENT PROXY CIRCULAR

General Information

This Management Proxy Circular (the "Circular") is furnished in connection with the solicitation of proxies by management of TransCanada PipeLines Limited ("TransCanada" or the "company") to be used at the annual meeting and at any adjournment or adjournments thereof (the "Meeting") of holders of common shares (the "common shares" or "shares") of TransCanada to be held in Montréal, Québec on Friday, April 28, 2000, at the place and for the purposes set out in the accompanying Notice of Annual Meeting (the "Notice of Meeting").

It is anticipated that copies of this Circular, TransCanada's 1999 Annual Report and the form of proxy for shareholders will be distributed to shareholders on or before March 27, 2000. The cost of soliciting proxies will be borne by TransCanada. While most proxies will be solicited by mail only, some shareholders may also be contacted by TransCanada employees personally or by telephone. In addition, TransCanada will provide proxy materials to brokers, custodians, nominees and fiduciaries and request that such materials be promptly forwarded to the beneficial owners of common shares registered in the names of such brokers, custodians, nominees and fiduciaries. TransCanada has retained Georgeson Shareholder Communications Canada; 66 Wellington Street West, T-D Tower, Suite 5210, Toronto Dominion Centre, P.O. Box 240, Toronto, Ontario M5K 1J3 at a fee of approximately $40,000 plus out-of-pocket expenses to aid in the solicitation of proxies from individual and institutional investors in Canada and the United States.

Unless otherwise stated, the information contained in this Circular is given as of the date hereof and all dollar amounts set forth herein are in Canadian dollars.

Record Date for Notice of Meeting and Provisions Relating to Voting

The board of directors of TransCanada has fixed March 10, 2000 as the record date for the purpose of determining shareholders entitled to receive the Notice of Meeting. Each shareholder is entitled to one vote for each common share shown as registered in such holder's name on the list of shareholders prepared as of the close of business on the record date, unless a shareholder has transferred any shares after the record date and the new holder of such shares establishes proper ownership and requests the Corporate Secretary of TransCanada, not later than the close of business on April 18, 2000, to include such holder's name on the list of shareholders entitled to vote at the Meeting. Such list is available for inspection during usual business hours at the office of Montreal Trust Company of Canada ("Montreal Trust"), 600, 530 - 8th Avenue S.W., Calgary, Alberta T2P 3S8 and will be available for inspection at the Meeting.

Appointment of Proxy Holders

Shareholders wishing to be represented by proxy at the Meeting must deposit a properly executed proxy with Montreal Trust prior to 4:30 p.m. (Mountain Daylight time) on Wednesday, April 26, 2000. All shares represented by a properly executed proxy will be voted or withheld from voting on the matters identified in the Notice of Meeting in accordance with the instructions of the shareholder as specified thereon.

If you have appointed a named appointee of management to act and vote on your behalf as provided in the enclosed form of proxy and you do not provide any instructions concerning any matter identified in the Notice of Meeting, the shares represented by such proxy will be voted in favour of: (i) the election of the persons nominated for election as directors; and (ii) the appointment of KPMG LLP, Chartered Accountants, as auditors and the authorization of the directors to set their remuneration as such.

The enclosed form of proxy, when properly signed, confers discretionary authority on the person or persons named to vote on any amendment to matters identified in the Notice of Meeting and on any other matter

properly coming before the Meeting. Management is not aware of any such amendment or other matter. If, however, any such amendment or other matter properly comes before the Meeting, the proxy will be voted at the discretion of the person or persons named therein. The persons named in the form of proxy are officers of TransCanada.

Revocability of Proxies

A shareholder may revoke a proxy by depositing an instrument in writing executed by such shareholder or such shareholder's attorney authorized in writing (or, in the case of a corporation, by a duly authorized officer or attorney), either at the registered office of TransCanada, 111 - 5th Avenue S.W., Calgary, Alberta, T2P 3Y6, at any time up to and including the last business day preceding the day of the Meeting or any adjournment thereof, or with the Chair of the Meeting on the day of the Meeting.

Voting Shares and Principal Shareholders

At February 29, 2000, the number of outstanding common shares was 474,530,701. Each common share carries one vote and such shares are the only class of TransCanada's shares entitled to be voted at the Meeting.

To the knowledge of the directors and officers of TransCanada, based on information at February 29, 2000, no individual or corporation beneficially owned, directly or indirectly, or exercised control over, more than 5% of the outstanding common shares of TransCanada.

Business to be Transacted at the Meeting

This Circular contains information relating to the receipt of TransCanada's consolidated financial statements, the election of directors, and the appointment of auditors.

1. Financial Statements

The consolidated financial statements of TransCanada for the year ended December 31, 1999 and the report of the auditors thereon will be placed before the Meeting. Additional copies of the Annual Report (which contains the consolidated financial statements), in English or French, may be obtained from the Corporate Secretary of TransCanada upon request and will be available at the Meeting.

2. Election of Directors

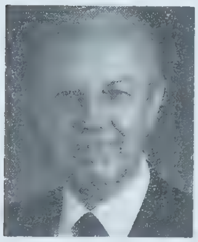
TransCanada's Articles provide for the board of directors to consist of a minimum of 10 and a maximum of 20 directors. The number of directors presently in office is 13. The board has set the number of directors to be elected at the Meeting at 13. The nominees for election as directors of TransCanada are D.D. Baldwin, R.B. Coleman, D. D'Alessandro, W. Dobson, R.F. Haskayne, K.L. Hawkins, D.S. Macdonald, J.M. MacLeod, H.P. Milavsky, J.R. Paul, H.G. Schaefer, W.T. Stephens, and J.D. Thompson.

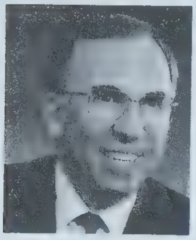
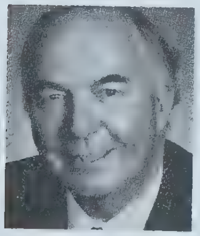
The Governance Committee of the board of directors reviews annually the qualification of persons proposed for election to the board of directors and submits its recommendations to the board of directors for consideration. The persons proposed for nomination are, in the opinion of the board of directors and in the opinion of management, well qualified to act as directors for the ensuing year. Each nominee has established his or her eligibility and willingness to serve as a director if elected. The persons named in the form of proxy are officers of TransCanada who intend to vote at the Meeting for the election of the nominees whose names are set forth below unless specifically instructed on the form of proxy to withhold such vote. If, prior to the Meeting, any of the listed nominees becomes unable or unwilling to serve, the persons named in the form of proxy will have the right to use their discretion in voting for a properly qualified substitute. Each director elected will hold office until the next annual meeting or until his or her successor is earlier elected or appointed.

Information Concerning the Directors

General Information

Set forth below are the names of the 13 proposed nominees; their municipalities of residence; all positions and offices held by them with TransCanada and its significant affiliates; their principal occupations or employment during the past five years; the year from which each has continually served as a director of TransCanada, or NOVA Corporation ("NOVA") prior to the 1998 merger with NOVA, as applicable; and the number of each class of securities of TransCanada owned by each of them or over which control or direction is exercised by each of them:

Proposed Nominee[1]	Principal Occupation	Director Since	Securities owned, controlled or directed[2]
 Douglas D. Baldwin, P. Eng. Calgary, Alberta	President and Chief Executive Officer of TransCanada since September 1999 and prior thereto held the same position on a interim basis since August 1, 1999. Until his retirement on December 31, 1998, Senior Vice-President and Director, Imperial Oil Limited (integrated energy).	April 1999	38,521[3][4]
 Ronald B. Coleman Calgary, Alberta	President, R. B. Coleman Consulting Co. Ltd. and Chairman, Dominion Equity Resource Fund Inc. (oil and gas activities).	July 1998 (director of NOVA since June 1987)	14,592[3]
 Dominic D'Alessandro Toronto, Ontario	President and Chief Executive Officer, The Manufacturers Life Insurance Company (insurance).	April 1999	11,231[5]

Proposed Nominee[1]	Principal Occupation	Director Since	Securities owned, controlled or directed[2]
 Wendy Dobson Uxbridge, Ontario	Professor, Rotman School of Management and Director, Institute for International Business, University of Toronto.	April 1992	6,597[5]
 Richard F. Haskayne, O.C., F.C.A. Calgary, Alberta	Chairman of the Board of TransCanada. Prior to July 1998 he was Chairman of the Board of NOVA (energy services and commodity chemicals).	July 1998 (director of NOVA since May 1991)	194,888[3]
 Kerry L. Hawkins Winnipeg, Manitoba	President, Cargill Limited (grain handlers, merchants, transporters and processors of agricultural products).	April 1996	5,563[5][6]
 The Hon. Donald S. Macdonald, P.C., C.C. Toronto, Ontario	Corporate Director. Prior to his retirement in February 2000, Mr. Macdonald was Counsel, McCarthy Tétrault (barristers and solicitors).	October 1991	4,334

Proposed Nominee[1]	Principal Occupation	Director Since	Securities owned, controlled or directed[2]
 J.M. (Jack) MacLeod Calgary, Alberta	Corporate Director.	July 1998 (director of NOVA since February 1993)	14,200[3]
 Harold P. Milavsky, F.C.A. Calgary, Alberta	Chairman, Quantico Capital Corp. (merchant banking and investment advisory services).	July 1998 (director of NOVA since April 1988)	83,455[3]
 James R. Paul Houston, Texas	Chairman, James and Associates (private investment firm).	April 1996	9,000
 Harry G. Schaefer, F.C.A. Calgary, Alberta	President, Schaefer & Associates (business advisory service) and Vice-Chair of TransCanada. Prior to May 1996, Mr. Schaefer was Chairman of TransAlta Utilities Corporation (generation and sale of electric energy).	April 1987	27,531[7]

Proposed Nominee[1]	Principal Occupation	Director Since	Securities owned, controlled or directed[2]
 W. Thomas Stephens Greenwood Village, Colorado	Corporate Director. President and Chief Executive Officer, MacMillan Bloedel (forest products) from October 1997 to October 1999. Mr. Stephens was Chairman and Chief Executive Officer, Johns Manville (building materials) from 1986 to 1996.	April 1999	2,896[5]
 Joseph D. Thompson, P. Eng. Edmonton, Alberta	Chairman, PCL Construction Group Inc. (general construction contractors). Prior to July 1997, Chairman, President and Chief Executive Officer of PCL Construction Group Inc.	April 1995	12,253[5][8]

Notes:

(1) *With the exception of Mr. Paul and Mr. Stephens, who are United States residents, all nominees are Canadian residents. The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of TransCanada, has been furnished by each of the nominees. Except as indicated in these notes, the nominees have sole voting and dispositive power with respect to the securities listed above.*

(2) *As to each class of shares of TransCanada, the percentage of outstanding shares beneficially owned by any one director or nominee or by all directors and officers of TransCanada as a group does not exceed 1% of the class so owned. Voting securities include common shares the directors who were formerly directors of NOVA (see Note 3) have a right to acquire through the exercise of stock options that are vested or that will vest within 60 days of the date of this Circular under TransCanada's Key Employee Stock Incentive Plan ("KESIP") and common shares the directors have a right to acquire under TransCanada's Deferred Share Unit Plan for Directors (the "DSU Plan"), both of which plans are described elsewhere in this Circular.*

(3) *Part of the compensation of the TransCanada directors who were formerly with NOVA was the granting of options under NOVA's Stock Option Plan. As part of 1998 merger with NOVA, all NOVA options were converted into options of NOVA Chemicals Ltd. (which split off as a separate public company) and KESIP options of TransCanada. As a result, the directors of TransCanada who were formerly directors of NOVA hold options under KESIP, which is otherwise restricted to employees of TransCanada. Under KESIP, each of these directors has the right to acquire the following common shares: Mr. Coleman — 6,184 shares, Mr. Haskayne — 74,888 shares, Mr. MacLeod — 6,184 shares, and Mr. Milavsky — 6,184 shares. In addition, Mr Baldwin, as an employee of TransCanada, has the right to acquire 25,000 common shares under KESIP.*

(4) *The shares listed include 100 Cumulative Redeemable First Preferred Shares, Series U, and 500 Cumulative Redeemable First Preferred Shares, Series Y.*

(5) *Under the DSU Plan, each of these directors has the right to acquire the following common shares: Mr. D'Alessandro — 1,231 shares, Ms. Dobson — 1,597 shares, Mr. Hawkins — 1,915 shares, Mr. Stephens — 896 shares, and Mr. Thompson — 1,915 shares.*

(6) *The shares listed include 2,500 shares held by Mr. Hawkins' wife. Mr. Hawkins disclaims beneficial ownership of such shares.*

(7) *The shares listed include 7,234 shares held by a company controlled by Mr. Schaefer's mother, 3,224 shares held by Mr. Schaefer's wife and 2,865 shares held by a company controlled by Mr. Schaefer's wife. Mr. Schaefer disclaims beneficial ownership of such shares.*

(8) *The shares listed include 6,730 shares held by a family trust, the beneficial owners of which are children of Mr. Thompson and Mr. Thompson's wife. Mr. Thompson disclaims beneficial ownership of such shares.*

Information Concerning the Compensation of Directors and Officers

Compensation of Directors

TransCanada's directors' compensation practices are designed to reflect the size and complexity of TransCanada and to reinforce the emphasis TransCanada wishes to make on linking directors' compensation with shareholder value. TransCanada requires each director to acquire and hold a minimum number of shares of TransCanada equal in value to five times the annual directors' retainer fee. Directors have a maximum of five years to reach this level of share ownership, which can be achieved by direct purchase of that number of shares or by means of directing the directors' retainer fees into TransCanada's Dividend Reinvestment and Share Purchase Plan or into the Deferred Share Unit Plan (see "Deferred Share Unit Plan for Directors").

For the financial year ended December 31, 1999, each director who was not an employee of TransCanada, other than the Chair, was paid in quarterly installments in arrears as follows: a directors' retainer fee of $27,000 per annum; a committee retainer fee of $3,000 per annum for each committee of the board of directors of which he or she was a member; and an additional fee of $4,000 per annum for each committee of the board of directors of which he or she was Chair. TransCanada also paid each such director a fee of $1,500 for attendance at each meeting or adjourned meeting of the board of directors or a committee thereof, and a travel fee of $1,500 for meetings for which round-trip travel time exceeded three hours, and reimbursed the directors for out-of-pocket expenses incurred in attending such meetings. Directors who are asked by TransCanada to undertake additional assignments are paid a per diem amount equal to the attendance fee for a board of directors' meeting. Directors who were U.S. residents were paid in U.S. dollars. Mr. Baldwin was not paid directors' fees after his appointment as President and Chief Executive Officer on September 22, 1999. The Chair, who was paid none of the other directors' fees outlined above, was paid a retainer fee of $300,000 per annum in respect of his duties as Chair, and $3,000 per chaired board meeting, and reimbursed for certain office and other expenses. The Vice-Chair was paid a retainer fee of $12,000 per annum in respect of his duties as Vice-Chair, in addition to his other director's fees as outlined above.

Deferred Share Unit Plan for Directors

In November 1998, the board of directors approved a deferred share unit plan ("DSU Plan") for non-employee directors. The DSU Plan allows board members, on a quarterly basis, to direct their annual directors' retainer fees to acquire units representing the right to acquire common shares. Additional units are acquired quarterly in amounts equal to the amount of common shares which could be acquired if dividends were payable on the units and were reinvested in common shares. The units are not eligible for the acquisition of common shares of TransCanada until termination of such director's service on TransCanada's board.

Compensation of Officers

Summary Compensation Table

The following table provides a summary of the remuneration earned by the current and former Chief Executive Officer and the four other most highly compensated policy-making executive officers of TransCanada (collectively, the "Named Executive Officers") for services rendered in all capacities during the financial years ended December 31, 1999, 1998 and 1997. Specific aspects of this compensation are described in the following tables.

	Annual Compensation				Long-Term Compensation		
					Awards	Payouts	
Name and Principal Position of the Named Executive Officers	Year	Salary $	Bonus(1) $	Other Annual Compensation(2) $	Securities Under Options Granted(3) (#)	LTIP Payouts $	All Other Compensation(4) $
D.D. Baldwin President and Chief Executive Officer	1999	367,500	350,000	0	100,000	0	0
G.W. Watson(5) Former President and Chief Executive Officer	1999 1998 1997	433,646 614,000 590,000	0 625,000 350,000	190,935 62,651 66,772	0 135,000 85,000	147,593 0 0	4,463,715 22,253 15,000
G.P. Mihaichuk Senior Vice-President and President, Transmission	1999 1998 1997	345,839 280,000 270,000	262,800 190,000 100,000	28,788 13,079 11,493	110,000 45,000 45,000	0 0 0	10,305 0 0
R.J. Turner Senior Vice-President and President, International	1999 1998	300,000 124,816	210,600 147,000	17,708 7,161	105,000 40,000	0 0	29,067 6,000
W. Mirosh Senior Vice-President, Corporate Strategy and Business Development	1999 1998 1997	301,961 253,263 237,784	202,500 172,000 100,000	28,343 18,860 18,408	100,000 40,000 50,324	0 0 0	2,025 0 0
R.K. Girling Senior Vice-President and Chief Financial Officer	1999 1998 1997	253,794 200,325 145,000	243,750 300,000 650,000	17,552 7,534 6,215	115,000 50,000 25,162	0 0 0	8,661 0 0

Notes:

(1) *Amounts referred to in this table as "Bonus" are paid pursuant to TransCanada's Incentive Compensation Program (described under "Report on Executive Compensation — Annual Incentive Compensation").*

(2) *Perquisites and other personal benefits do not, in the aggregate, exceed the lesser of $50,000 and 10 per cent of the total of the annual salary and bonus for any of the Named Executive Officers. The amounts in this column include the value of salary paid in lieu of vacation, flexible benefit credits paid out as cash, and TransCanada's contributions under the Employee Stock Savings Plan (described under "Report on Executive Compensation — Employee Stock Savings Plan") and the Defined Contribution Pension Plan (described under "Pension and Retirement Benefits").*

(3) *The amounts in this column reflect the number of stock options granted under the Key Employee Stock Incentive Plan (1995) ("KESIP") to each of the Named Executive Officers in each of the years referred to. KESIP is described under "Report on Executive Compensation — Key Employee Stock Incentive Plan". A similar number of performance units were granted in 1999, 1998 and 1997 under the Performance Unit Plan (described under "Report on Executive Compensation — Performance Unit Plan"). For the most recent year, although the stock option grant was approved in February 2000, it was earned by the Named Executive Officer in the year*

ended December 31, 1999. The amounts in this column also include, where applicable, the stock options granted to the Named Executive Officers in February 2000 under the Special Performance Incentive Program (described under "Report on Executive Compensation — Special Performance Incentive Program").

(4) *The amounts in this column include amounts paid to the Named Executive Officers by subsidiaries and affiliates of TransCanada (including directors' fees paid by affiliates and amounts paid for serving on management committees of partnerships in which TransCanada holds an interest).*

(5) *Mr. Watson resigned as President and Chief Executive Officer in July 1999. Under the terms of his employment agreement, a retiring allowance was paid, included in "All Other Compensation", along with any director fees paid by TransCanada subsidiaries and affiliates.*

Long-Term Incentive Plans — Awards in 1999

The following table sets forth information regarding long-term incentive plan awards made to the Named Executive Officers during the financial year ended December 31, 1999. See "Report on Executive Compensation — Performance Unit Plan" for information with respect to this plan.

Name	Units[1] (#)	Period Until Maturation[2]	Estimated Future Payouts Under Non-Securities Price-Based Plans		
			Threshold ($ or #)	Target ($ or #)	Maximum ($)
D.D. Baldwin	100,000	September 20, 2009	N/A	N/A	0
G.W. Watson[3]	135,000	July 31, 2004	N/A	N/A	0
	106,939	July 31, 2004	N/A	N/A	129,396
	62,905	July 31, 2004	N/A	N/A	134,115
	38,991	July 31, 2004	N/A	N/A	0
	80,518	July 31, 2004	N/A	N/A	240,787
G.P. Mihaichuk	40,000	February 28, 2010	N/A	N/A	N/A
	50,000	February 1, 2010	N/A	N/A	N/A
	20,000	July 29, 2009	N/A	N/A	0
	45,000	March 1, 2009	N/A	N/A	0
	56,614	December 9, 2007	N/A	N/A	68,503
	27,175	December 5, 2006	N/A	N/A	57,938
	62,905	May 15, 2006	N/A	N/A	161,115
R.J. Turner	35,000	February 28, 2010	N/A	N/A	N/A
	50,000	February 1, 2010	N/A	N/A	N/A
	20,000	July 29, 2009	N/A	N/A	0
	40,000	March 1, 2009	N/A	N/A	0
W. Mirosh	30,000	February 28, 2010	N/A	N/A	N/A
	50,000	February 1, 2010	N/A	N/A	N/A
	20,000	July 29, 2009	N/A	N/A	0
	40,000	March 1, 2009	N/A	N/A	0
	50,324	December 9, 2007	N/A	N/A	60,892
	27,175	December 5, 2006	N/A	N/A	57,938
	13,242	April 24, 2006	N/A	N/A	39,601
R.K. Girling	45,000	February 28, 2010	N/A	N/A	N/A
	50,000	February 1, 2010	N/A	N/A	N/A
	20,000	July 29, 2009	N/A	N/A	0
	25,000	March 1, 2009	N/A	N/A	0
	25,000	December 3, 2008	N/A	N/A	0
	25,162	December 9, 2007	N/A	N/A	30,446

Notes:

(1) *For the most recent year, although the Performance Unit Plan award was approved on February 28, 2000, it was earned by the Named Executive Officer in 1999. The Human Resources Committee determined in February 2000 that no cash amount should accrue for*

1999 in respect of the awards made from 1995 to 1999 for each Named Executive Officer. The amounts referred to herein have not and may never be received by the Named Executive Officers. See "Report on Executive Compensation — Performance Unit Plan". The amounts in this column also include, where applicable, the performance units granted to the Named Executive Officers on February 1, 2000 under the Special Performance Incentive Program (described under "Report on Executive Compensation — Special Performance Incentive Program"). No amount has been accrued in respect of the awards made on February 1, 2000 and February 28, 2000.*

(2) The exercise period for these units is from the third to the tenth anniversary of the award date (see "Report on Executive Compensation — Performance Unit Plan") with the exception of performance units granted under the Special Performance Incentive Program, described under "Report on Executive Compensation — Special Performance Incentive Program".

(3) Upon his resignation on July 31, 1999, Mr. Watson's performance units were immediately vested and can be redeemed until the earlier of their normal expiry dates and July 31, 2004, and are not eligible to accrue any future cash amounts.

Options Granted During the Most Recently Completed Financial Year

The following table sets forth the stock option awards under KESIP earned during the financial year ended December 31, 1999 to each of the Named Executive Officers. See "Report on Executive Compensation — Key Employee Stock Incentive Plan" for information with respect to this plan.

Name	Number of Common Shares Under Options Granted[(1)(2)]	% of Total Options Granted to Employees in 1999	Exercise Price ($/common share)[(3)]	Market Value of Common Shares Underlying Options on the Date of Grant ($/common share)	Expiration Date
D.D. Baldwin	100,000	2.47	21.00	20.80	September 20, 2009
G.W. Watson	0	0	0	0	N/A
G.P. Mihaichuk	40,000 50,000 20,000	0.99 1.23 0.49	10.03 11.35 19.86	10.00 11.60 20.10	February 28, 2010 February 1, 2010 July 29, 2009
R.J. Turner	35,000 50,000 20,000	0.86 1.23 0.49	10.03 11.35 19.86	10.00 11.60 20.10	February 28, 2010 February 1, 2010 July 29, 2009
W. Mirosh	30,000 50,000 20,000	0.74 1.23 0.49	10.03 11.35 19.86	10.00 11.60 20.10	February 28, 2010 February 1, 2010 July 29, 2009
R.K. Girling	45,000 50,000 20,000	1.11 1.23 0.49	10.03 11.35 19.86	10.00 11.60 20.10	February 28, 2010 February 1, 2010 July 29, 2009

Notes:

(1) Annual option grants under KESIP earned by the Named Executive Officers in 1999 were approved by the board of directors on February 28, 2000 and are reflected in this Circular. The amounts in this column also include, where applicable, the stock options granted to the Named Executive Officer on February 1, 2000 under the Special Performance Incentive Program (described under "Report on Executive Compensation — Special Performance Incentive Program").

(2) Twenty-five per cent of the options are exercisable upon the award date, and twenty-five per cent thereafter on each of the first three anniversary dates of the granting of the option, with the exception of options granted under the Special Performance Incentive Program, described under "Report on Executive Compensation — Special Performance Incentive Program".

(3) The exercise price is equal to the weighted average closing price of TransCanada's common shares on The Toronto Stock Exchange during the five trading days immediately prior to the grant of the options.

Aggregate Option Exercises During 1999 Financial Year and 1999 Financial Year-End Option Values

The following table summarizes, for each of the Named Executive Officers, the number of stock options, if any, exercised during the financial year ended December 31, 1999, the aggregate value realized upon exercise, the total number of unexercised options, if any, held at February 29, 2000 and the value of unexercised "in-the-money" options at December 31, 1999. The total number of unexercised options shown

in the table include option grants for 1999 which were approved by the board in February 2000. The value realized on exercise is the difference between the closing price of the underlying common shares on the exercise date and the exercise price of the option. The value of unexercised "in-the-money" options at the financial year end is the difference between the exercise price and the closing price of $12.50 per share of TransCanada's common shares on The Toronto Stock Exchange on December 31, 1999. These amounts, unlike the amounts shown in the column "Aggregate Value Realized", have not been and may never be realized. The underlying options have not been and will not necessarily be exercised and the actual gains, if any, on exercise will depend on the value of TransCanada's common shares on the date of exercise.

Name	Common Shares Acquired on Exercise (#)	Aggregate Value Realized ($)	Unexercised Options at February 29, 2000 (#)		Value of Unexercised in-the-Money Options at December 31, 1999 ($)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
D.D. Baldwin	0	0	25,000	75,000	0	0
G.W. Watson	55,346	336,649	520,984	0	0	0
G.P. Mihaichuk	0	0	158,789	142,905	0	0
R.J. Turner	0	0	49,634	122,878	0	0
W. Mirosh	0	0	100,660	130,081	0	0
R.K. Girling	0	0	53,870	136,292	0	0

Indebtedness of Directors, Executive Officers and Senior Officers

As at February 29, 2000, the aggregate amount of indebtedness to TransCanada incurred by all directors, officers, employees and former directors, officers and employees of TransCanada or any of its subsidiaries amounted to $3,509,739.

Pension and Retirement Benefits

The Named Executive Officers participate in TransCanada's non-contributory pension plans (the "Pension Plans"). As of January 1, 2000, all employees of TransCanada participate in a common pension program under which they may select a defined benefit, defined contribution or combination (defined benefit and defined contribution) pension plan benefit. Officers and other eligible employees accrue benefits under both a registered pension plan and supplemental retirement benefit plan.

Under TransCanada's Registered Pension Plan (the "RPP"), employees are offered the following three options:

(a) A Defined Benefit Plan (the "DB Plan") under which the annual pension plan benefits are integrated with Canada Pension Plan benefits and are based on: 1.25% of a person's highest average pensionable earnings up to the Final Average Year's Maximum Pensionable Earnings; plus 1.75% of a person's highest average pensionable earnings in excess of the Final Average Year's Maximum Pensionable Earnings; multiplied by the total number of years credited in the Registered Pension Plan ("Credited Pensionable Service"). Pensionable earnings include base salary and targeted Incentive Compensation payments under the Incentive Compensation Program for officers and actual Incentive Compensation payments to the targeted percentage for other employees. Highest average pensionable earnings are defined as the average annual pensionable earnings during the 36 consecutive months when earnings were highest in the last 15 years prior to termination of employment. Final Average Year's Maximum Pensionable Earnings are defined as the three-year average of the Year's Maximum Pensionable Earnings as determined in accordance with the *Canada Pension Plan Act*. Pension amounts paid to retired employees under the DB Plan will be indexed annually, effective January 1st of each calendar year after 2000, at 40% of the rate of increase in the Consumer Price Index ("CPI") over the course of the preceding year ending on September 30 of such year;

(b) A Defined Contribution Plan (the "DC Plan") under which 6% of pensionable earnings are contributed annually by TransCanada to the employee's pension plan; and

(c) A Combined Plan (the "Combined Plan") which is a combination of the DB Plan and the DC Plan under which benefits are based on 0.75% of a person's Credited Pensionable Service together with TransCanada contributions to the DC Plan in the amount of 3% per annum.

Pension plan benefits are subject to a ceiling imposed by the *Income Tax Act* (Canada) of $1,722 per month for each year of Credited Pensionable Service, with the result that benefits cannot be earned in the Registered Pension Plan on salary above approximately $109,000 per annum.

Under the Executive Supplemental Pension Plan (the "ESPP") which was amended in 1994, 1996, 1997, and 1999, officers of TransCanada are entitled to supplementary pension benefits. In respect of credited service prior to May 1990, for officers who were members of the executive plan in May 1990, the annual pension benefit is equal to 3.33% of highest average plan earnings for each of the first 15 years of service with TransCanada and 2% for each of the next 10 years. These pension benefits are inclusive of benefits payable under the Registered Pension Plan and the Canada Pension Plan. The maximum aggregate annual pension benefit payable to those employees with credited service granted prior to May 1990 under the Executive Supplemental Pension Plan is 70% of highest average pensionable earnings at the date of retirement, less the amount payable under the Canada Pension Plan. In respect of credited service on and after May 1990, the annual pension benefit is equal to the amount calculated using a formula of 1.75% of highest average pensionable earnings for earnings above the ceiling imposed by the *Income Tax Act* (Canada) referred to above.

Under the Supplemental Pension Plan ("SPP"), which is available to senior employees who are not officers of TransCanada, an accrued pension in excess of the Revenue Canada maximum will be paid to such employees in the form of monthly income upon retirement.

Under the DB Plan, the DB component of the Combined Plan, the ESPP, and the SPP, a participant will receive the following normal form of pension:

(a) in respect of credited service prior to January 1, 1990, upon retirement, a monthly pension payable for life with 60% continuing to the participant's designated joint annuitant; and

(b) in respect of credited service on and after January 1, 1990, upon retirement, a monthly pension as described in (a) above, and for unmarried participants or married participants who have so elected and with spousal consent have waived the automatic form of pension, a monthly pension payable for life with payments to the participant's estate guaranteed for the balance of 10 years if the participant dies within 10 years of retirement.

In lieu of the normal form of pension, a participant may elect specified optional forms of pension payment which represent an actuarial equivalent of the normal form.

Employees who became employees of TransCanada as a result of the merger between TransCanada and NOVA participate in the RPP and the ESPP or the SPP; however, the benefit payable for credited service prior to January 1, 2000 is calculated in accordance with the provisions of the former NOVA Retirement Plan for Western Canadian Salaried Employees (the "former NOVA Plan") and prior NOVA supplementary pension agreements. Under the former NOVA Plan, the pre-2000 benefit is equal to the sum of A plus B where:

A is 1% times credited service times the lesser of:

(i) Highest average pensionable earnings; and

(ii) Final Average Year's Maximum Pensionable Earnings

B is 1.6% times credited service times the amount, if any, by which the highest average pensionable earnings exceeds the Average Maximum Pensionable Earnings.

Prior to January 1, 2000, the highest average pensionable earnings included base salary only.

Pension benefits are not subject to any deduction for social security or other offset amounts.

Assuming that the Named Executive Officers named below remain employed by TransCanada until age 65 and that the Registered Pension Plan and the Executive Supplemental Pension Plan remain in force substantially in their present forms, such officers will have approximately the following listed number of years of Credited Pensionable Service: G.P. Mihaichuk — 23 years; R.J. Turner — 36 years; W. Mirosh — 14 years under the RPP (19 years under the ESPP); R.K. Girling — 31 years. Mr. Baldwin does not participate in the Pension Plan. Mr. Watson had 9 years of Credited Pensionable Service under the RPP (12 years under the ESPP) at his resignation on July 31, 1999.

The following tables separately set out for TransCanada officers firstly and then the pre-2000 benefit payable for previous NOVA officers, the estimated annual DB Plan benefits (based on the "joint and 60% survivor" method) payable for credited service under the DB Plan and the ESPP (excluding amounts payable under the Canada Pension Plan) in specified highest average pensionable earnings and years of Credited Pensionable Service classifications.

Highest Average Pensionable Earnings	Years of Credited Pensionable Service[1]					
	15	20	25	30	35	40
$ 200,000	$ 50,000	$ 66,000	$ 83,000	$ 99,000	$116,000	$133,000
300,000	76,000	101,000	127,000	152,000	177,000	203,000
400,000	102,000	136,000	170,000	204,000	238,000	273,000
500,000	128,000	171,000	214,000	257,000	300,000	343,000
600,000	155,000	206,000	258,000	309,000	361,000	413,000
700,000	181,000	241,000	302,000	362,000	422,000	483,000
800,000	207,000	276,000	345,000	414,000	483,000	553,000
900,000	233,000	311,000	389,000	467,000	545,000	623,000
1,000,000	260,000	346,000	433,000	519,000	606,000	693,000
1,200,000	312,000	416,000	520,000	624,000	728,000	833,000

Pre-2000 Benefit for Former NOVA Officers

Highest Average Pensionable Earnings	Years of Credited Pensionable Service[1]					
	15	20	25	30	35	40
$ 200,000	$ 45,000	$ 60,000	$ 74,000	$ 89,000	$104,000	$119,000
300,000	69,000	92,000	114,000	137,000	160,000	183,000
400,000	93,000	124,000	154,000	185,000	216,000	247,000
500,000	117,000	156,000	194,000	233,000	272,000	311,000
600,000	141,000	188,000	234,000	281,000	328,000	375,000
700,000	165,000	220,000	274,000	329,000	384,000	439,000
800,000	189,000	252,000	314,000	377,000	440,000	503,000
900,000	213,000	284,000	354,000	425,000	496,000	567,000
1,000,000	237,000	316,000	394,000	473,000	552,000	631,000
1,200,000	285,000	380,000	474,000	569,000	664,000	759,000

Note:

(1) *Amounts are rounded to the nearest one thousand dollars.*

Employment Contracts

TransCanada has entered into an agreement with Mr. Baldwin with respect to his position as President and Chief Executive Officer of the company until December 31, 2000. Should TransCanada terminate Mr. Baldwin's employment prior to December 31, 2000, the company will pay Mr. Baldwin the salary he would have received until that date. TransCanada has also provided termination terms to both Mr. Mirosh

and Mr. Mihaichuk that would entitle each of them, upon an involuntary termination, to be paid the equivalent of two years salary and bonuses and two years of additional pensionable service. Mr. Mirosh is also entitled to an additional five years of pensionable service under the ESPP if the company terminates his employment, or in any event, after he has completed ten years of service with the company. When Mr. Watson ceased his employment with TransCanada, he was paid, under the terms of his employment agreement, the equivalent of 36 months of salary, bonus and other perquisites.

Report of the Human Resources Committee

Composition of the Human Resources Committee

The Human Resources Committee of the board of directors (the "Committee") is composed of six directors, K.L. Hawkins, W. Dobson, D.S. Macdonald, H.P. Milavsky, W.T. Stephens, and J.D. Thompson, who are neither officers nor former officers of TransCanada or any of its subsidiaries. The Committee is charged with the mandate described under "Other Information — Corporate Governance — Human Resources Committee". The Committee reports to the board of directors all material matters considered and approved by it.

Report On Executive Compensation

When determining the level of executive compensation, the Committee utilizes data prepared by independent compensation consultants. Competitive compensation data for a comparator group comprised of approximately 26 large Canadian public companies is referenced. These companies are of similar size and complexity to TransCanada and are representative of the types of organizations with which TransCanada must compete for its executive officers.

The main objectives of the compensation program for the executive officers of TransCanada are:

- To attract, retain and appropriately motivate the highly qualified workforce necessary to achieve TransCanada's annual and longer-term business objectives; and
- To reinforce the commitment of the executive officers to maximize shareholder value.

In order to achieve these objectives, the total compensation program for executive officers has several components, each of which is performance-based. In addition, in this year of transition and change, TransCanada has put in place for its executive officers a special performance incentive program comprised of a prospective cash incentive payment to be earned over 2000 and payable in certain circumstances in 2001, and the granting of special incentive options.

When determining how TransCanada's compensation program compares against the competitive compensation data, the Committee considers it appropriate that considerable emphasis should be placed on actual performance achievements as measured against pre-established corporate and business unit goals, as well as individual executive officer performance management objectives.

The following comprise the components of executive compensation at TransCanada:

Base Salaries

Base salaries for executive officers are paid within salary levels established for each position on the basis of the level of responsibility. The executive salary levels are determined through annual compensation surveys of TransCanada's comparator group. Individual salaries within a level are determined by each officer's contribution to TransCanada, as assessed by the Committee in consultation with the Chief Executive Officer.

Employee Stock Savings Plan

Executive officers participate in the Employee Stock Savings Plan on the same basis as all other TransCanada employees. Each employee may direct a payroll deduction toward the purchase of common shares. TransCanada matches the employee-directed purchase in an amount equal to 25% of the employee amount to a maximum additional company contribution of 1% of the employee's base pay. The shares

purchased and the dividends paid on those shares are allocated to the employee's account and vest immediately.

Annual Incentive Compensation

Annual incentive compensation is designed to link the total cash compensation levels to the achievement of corporate, business unit and individual goals. The plan provides for annual cash awards based on corporate and business unit performance and individual contribution to TransCanada's results, measured against objectives that are determined at the beginning of each year. For 1999, the executive officers had several common objectives including financial targets for TransCanada, strategy development and implementation, safety and environmental measures, Year 2000 compliance, and leadership development. The objectives for 2000 include financial targets for TransCanada, divestiture and growth, strategy development and implementation, safety and environmental measures, and leadership development.

If threshold performance levels are not reached, no incentive is payable. If target performance levels are reached, the target incentive award is payable. Provision is made in the plan to pay incentives in excess of the target award, to a maximum established by the board, if performance in a year is exceptional. The factor by which the incentive award is calculated is pro-rated between the threshold, target and maximum award depending on actual performance under each of the components. All awards made to executive officers are subject to the review and approval of the Committee.

Key Employee Stock Incentive Plan

In 1979 TransCanada established the Key Employee Stock Incentive Plan, which was amended and restated in April 1995 and May 1998. The plan is currently in place until December 31, 2004. The amended and restated plan is called the Key Employee Stock Incentive Plan (1995) ("KESIP"). Executive officers, as well as other key employees, are eligible to participate in KESIP.

KESIP is administered by the Committee. The exercise price of options is determined by the Committee at the time options are awarded and must be at least equal to the weighted average closing price of the common shares of TransCanada on The Toronto Stock Exchange during the five trading days immediately preceding the award dates. Options granted under KESIP normally vest as to 25% on the date of grant and as to 25% on each anniversary thereafter for a period of three years. At the time of awarding an option, the expiry date (the last day on which the option is exercisable, which is generally 10 years from the date on which it was granted) is established.

KESIP is a component of the executive officers' total compensation program. KESIP is intended to reinforce executive officer commitment to the long-term growth in profitability of TransCanada and in shareholder value. The size of the annual stock option award to individual executive officers is determined by considering individual performance, level of responsibility, authority and overall importance to the current welfare of TransCanada, and the degree to which each executive officer's long-term potential and contribution will be key to the long-term success of TransCanada. The Committee has flexibility in the determination of the size of the grant and, when making its decisions, takes into account all relevant circumstances including the value of TransCanada's stock option grants in comparison with its competitors. In the case of stock options, executive officers benefit only if the market value of the stock subject to the option at the time of exercise is greater than that at the time of the award.

The total number of common shares reserved for issuance under KESIP was increased to 25,000,000 effective July 3, 1998. Under KESIP approximately 16,167,445 common shares were issuable under outstanding options at February 29, 2000.

Performance Unit Plan

In 1995 TransCanada established a Performance Unit Plan, which is administered by the Committee. Executive officers, as well as other key employees, are eligible to participate in the Performance Unit Plan.

Under the Performance Unit Plan, a performance unit accrues annually a cash amount equal to the dividends paid on a common share in a financial year, provided TransCanada's total shareholder return is equal to or greater than that of the peer group index for such financial year, or if TransCanada's total

shareholder return is less than that of the peer group index for such year, such lesser amount, if any, as may be determined by the Committee. The actual amount accrued on a unit during a financial year may not, in any event, exceed the dividends paid on one common share during such financial year.

A performance unit may be exercised for the amount accrued on the unit at any time during the period which generally begins on the third anniversary of the award date and is deemed to be exercised automatically on the tenth anniversary of the award date. However, at the time of exercise the market price of a common share plus the amount accrued on the unit must be equal to or greater than the market price of a common share on the award date of the unit, and a KESIP option, awarded on the same date as the unit, must have been previously exercised.

On the same date as the Committee determines the number of stock options to be awarded under the terms of KESIP, it also may determine an equivalent number of units be granted under the Performance Unit Plan. The purpose of the Performance Unit Plan is to tie a portion of executive compensation to TransCanada's performance in relation to both share price and dividend payments. No Performance Unit Plan accrual was declared for 1999.

As at February 29, 2000, 11,715,419 units under the Performance Unit Plan were outstanding.

Special Performance Incentive Program

The Special Performance Incentive Program was implemented in February 2000. It was designed to further link cash, KESIP, and Performance Unit Plan awards for the executive officers to the achievement of certain corporate goals and strategies with the objective of increasing shareholder return over the next eighteen to twenty-four months.

The program provides for one-time cash incentive awards to be made in 2001 based on corporate earnings, balance sheet restoration, transmission regulatory reform and growth strategy measured against stretch objectives that were established in January 2000. If target performance levels are reached, the award is payable. If certain threshold performance objectives are not met, there is no payment under this program. If performance is exceptional, provision is made in the program to pay incentives in excess of the target award to a maximum established by the board of directors. The factors used to calculate the incentive award are pro-rated from no payout, to target payout, to maximum payout depending on actual performance under each of the components and each of the weightings of the components for each executive officer. All awards are subject to the review and approval of the Committee.

Also as part of this program, each executive officer, other than the Chief Executive Officer, has been granted 50,000 KESIP stock options and related units under the Performance Unit Plan on February 1, 2000 at an exercise price of $11.35. These options and performance units will vest after 24 months from the date of the grant only if the share price is $15.00 or higher for 15 consecutive trading days on The Toronto Stock Exchange, at a point in time after the 24 month period.

Total Compensation

If the corporate and individual executive officer performance targets are met, and assuming stock growth and dividend payment assumptions are correct for the KESIP and Performance Unit Plan components, it is intended that the total executive officer compensation be paid at the 75th percentile of competitive compensation. The more senior the executive officer, the more closely compensation is tied to the actual performance of TransCanada. Accordingly, a higher proportion of the total compensation package is at risk for the executive officers.

Compensation of the Chief Executive Officer

As described under "Compensation of Officers — Employment Contracts", Mr. Baldwin's compensation is determined by the terms of his employment contract with TransCanada. Mr. Baldwin's compensation was established with reference to the same comparator group described above. The Committee makes recommendations to the board regarding Mr. Baldwin's compensation on the same performance-related basis as for the other executive officers. The performance and compensation of Mr. Baldwin will be reviewed on an annual basis, commencing in August 2000. Mr. Baldwin's compensation has the same

components as those described for the other members of the executive officer group: base salary, incentive compensation and the long-term KESIP and Performance Unit Plan programs. Mr. Baldwin is not participating in either the TransCanada Pension Plan or the Employee Stock Savings Plan. Mr. Baldwin is entitled to participate in the cash component of the Special Performance Incentive Program, but received none of the associated KESIP stock options or performance units.

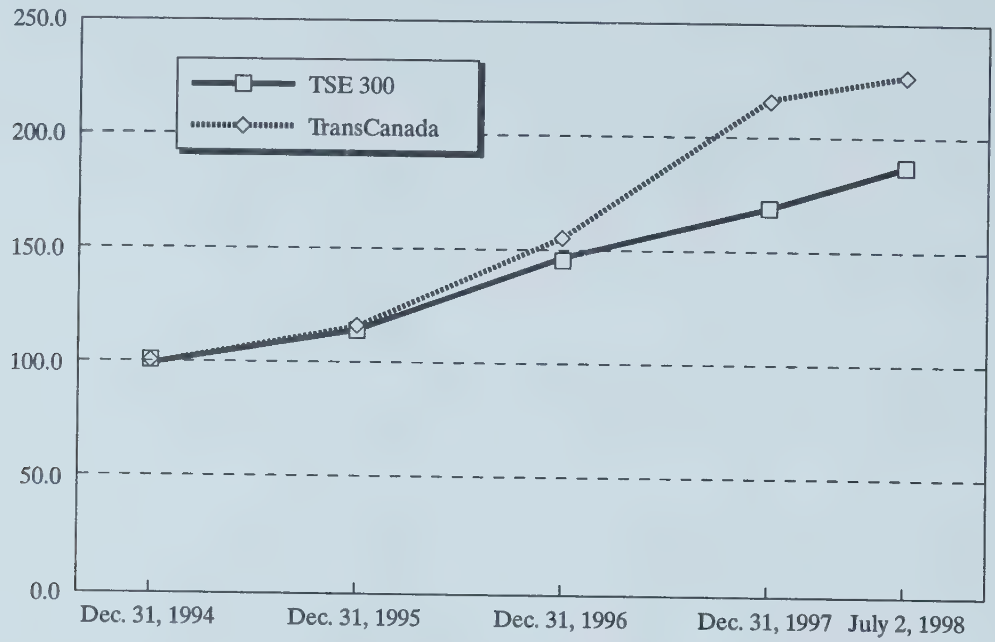
In 1999, Mr. Baldwin's annual base salary was $750,000 and will remain at $750,000 for 2000. Under the Incentive Compensation Plan, Mr. Baldwin is eligible for up to two times the target payment. Fifty percent of his award is directly related to achieving pre-established quantitative and qualitative corporate objectives and fifty percent is dependent on his defined individual achievements. In recognition of his contribution to TransCanada's performance in 1999, an Incentive Compensation payment of $350,000 was approved. In September, an award of 100,000 stock options and performance units was made under KESIP and the Performance Unit Plan upon his appointment as President and Chief Executive Officer. His units under the Performance Unit Plan accrued a nil potential future cash value in 1999.

Submitted by the Human Resources Committee of the Board of Directors:

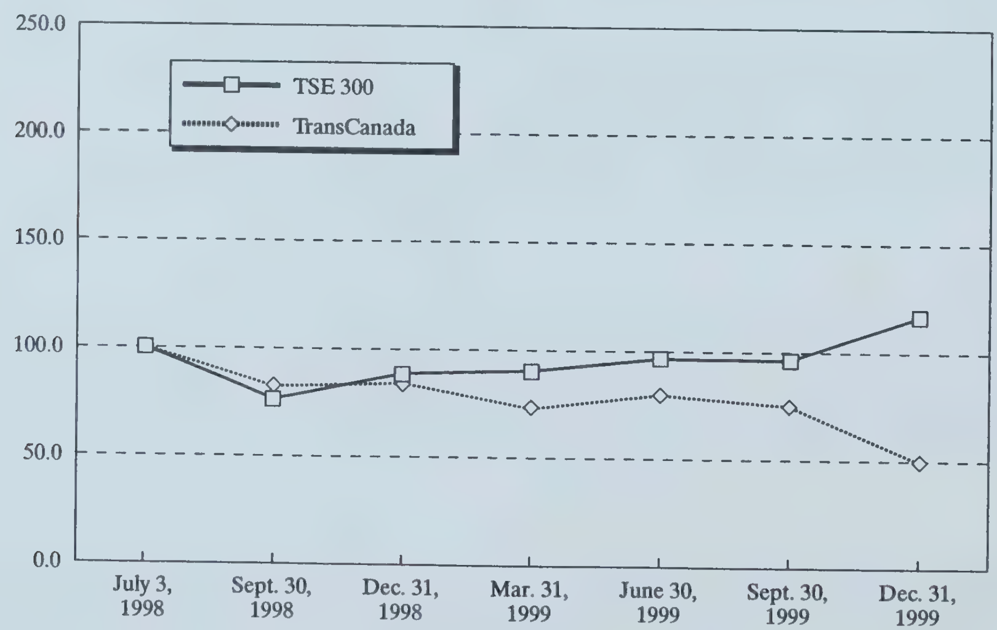
K.L. Hawkins (Chair)
W. Dobson
D.S. Macdonald
H.P. Milavsky
W.T. Stephens
J.D. Thompson

Performance Graphs

The following graphs compare TransCanada's five year cumulative total shareholder return to the TSE 300 composite index. The first graph is for the period before the July 1998 merger with NOVA. It reflects a $100 investment on December 31, 1994 and assumes reinvestment of dividends until July 2, 1998, the period before the merger with NOVA. The second graph assumes a $100 investment on July 3, 1998 and assumes reinvestment of dividends until December 31, 1999. The two graphs are required in order to reflect the issuance on July 2, 1998 of approximately 235 million TransCanada common shares pursuant to the terms of the merger with NOVA.



	Dec 31, 1994	Dec 31, 1995	Dec 31, 1996	Dec 31, 1997	Jul 2, 1998
TransCanada	100.0	116.5	156.0	216.8	226.7
TSE 300	100.0	114.5	147.0	169.0	187.4



	Jul 3, 1998	Sep 30, 1998	Dec 31, 1998	Mar 31, 1999	Jun 30, 1999	Sep 30, 1999	Dec 31, 1999
TransCanada	100.0	82.3	84.0	73.0	79.7	75.0	49.5
TSE 300	100.0	75.4	88.5	90.5	98.5	96.1	116.6

3. Appointment of Auditors

The board of directors recommends that KPMG LLP, Chartered Accountants, be reappointed as TransCanada's auditors to hold office until the close of the next annual meeting and that the directors be authorized to fix their remuneration as such. KPMG LLP have served as the auditors of TransCanada since 1956. The appointment of auditors will be decided by a majority of votes cast by shareholders at the Meeting.

Representatives of KPMG LLP will be present at the Meeting, will be given the opportunity to make a statement if they so wish and will respond to appropriate questions.

Other Information

Corporate Governance

TransCanada's board of directors and the members of TransCanada's management are committed to the highest standard of corporate governance. TransCanada's corporate governance practices comply with the Guidelines for Improved Corporate Governance adopted by The Toronto Stock Exchange. TransCanada's principal objective in directing and managing its business and affairs is to enhance shareholder value. TransCanada believes that effective corporate governance improves corporate performance and benefits all shareholders.

TransCanada's "Statement of Corporate Governance Practices" is attached to this Circular as Appendix 'A'. It has been approved by the Governance Committee of the board and by the board as a whole. Additional information on TransCanada's board and its committees is set forth below. The board has also approved a detailed set of corporate governance guidelines that describe TransCanada's governance regime. A copy of these guidelines is available on request by contacting the Corporate Secretary at TransCanada's corporate office in Calgary.

The board discharges its responsibilities directly and through committees. At regularly scheduled meetings, members of the board and management discuss a broad range of issues relevant to TransCanada's strategy and business interests. The board also receives reports from management on TransCanada's operational and economic performance. The board has nine scheduled meetings each year and unscheduled meetings are held from time to time as required. There were thirteen meetings of the board in 1999.

Description of the Board Committees and their Mandates

The board has four standing committees: the Audit and Risk Management Committee; the Governance Committee; the Health, Safety and Environment Committee; and the Human Resources Committee. All members of all Committees are unrelated directors.

The board determined there was no further requirement for an Executive Committee and dissolved the Executive Committee effective February 1, 2000. This Committee's mandate was to exercise the powers of the board (with certain exceptions prescribed by law) where expedient action was required in circumstances where holding a board meeting was not practicable. It was decided that only the full board should make board decisions and that the board would ensure its availability for such decisions. The Committee was comprised of D.D. Baldwin, K.L. Hawkins, R.F. Haskayne, J.M. MacLeod, H.P. Milavsky and H.G. Schaefer.

Audit and Risk Management Committee

This committee reviews TransCanada's audited consolidated financial statements and selected corporate disclosure documents including the annual report, the annual information form, all prospectuses and other offering memoranda, and any financial statements required by regulatory authorities before they are approved by the board. It reviews and recommends to the board the public release of quarterly financial results, and it monitors accounting, financial reporting, control and audit functions, reviews risk management policies and reviews issues relating to legal and regulatory responsibilities to ensure compliance. The Audit and Risk Management Committee reviews the audit plans of the internal and

external auditors and meets with them, in each case independently of other management. It reviews and reports to the board on TransCanada's risk management policies and procedures and reviews the internal control procedures to determine their effectiveness and to ensure compliance with TransCanada's policies, and avoidance of conflicts of interest.

Chair: H.P. Milavsky
Members: R.B. Coleman, D. D'Alessandro, K.L. Hawkins, J.R. Paul, H.G. Schaefer

Governance Committee

The Governance Committee's mandate is to enhance TransCanada's governance through a continuing assessment of TransCanada's approach to corporate governance. This Committee is responsible for recommending to the board candidates for nomination as directors and the composition of the various board committees, and reviewing and recommending compensation for board and committee service. The Governance Committee also reviews the performance of directors and the board, monitors the relationship between management and the board, and reviews TransCanada's structures to ensure that the board is able to function independently of management. It is also mandated to undertake initiatives as are needed to help deliver pre-eminent corporate governance.

Chair: H.G. Schaefer
Members: D. D'Alessandro, W. Dobson, J.M. MacLeod, J.R. Paul

Health, Safety and Environment Committee

The Health, Safety and Environment Committee's mandate is to monitor the health, safety and environmental practices and procedures of TransCanada and its subsidiaries in an effort to ensure compliance with applicable legislation and industry standards and to prevent or mitigate losses. The Health, Safety and Environment Committee also considers whether the implementation of TransCanada's policies related to health, safety and environmental matters is effective. It reviews, reports and, when appropriate, makes recommendations to the board on TransCanada's policies and procedures related to health, safety and the environment. This Committee meets separately with relevant officers of TransCanada and its business units who have responsibility for these matters and reports to the board on such meetings.

Chair: J.M. MacLeod
Members: R.B. Coleman, D.S. Macdonald, W.T. Stephens, J.D. Thompson

Human Resources Committee

This Committee reviews human resource policies and plans, monitors succession planning, assesses the performance of the Chair and the Chief Executive Officer and other senior officers of TransCanada and its major subsidiaries against set objectives. The Human Resources Committee also approves the salary and other remuneration to be awarded to senior executive officers of TransCanada and its major subsidiaries. The Human Resources Committee reports to the board with recommendations on the remuneration package for the Chair and the Chief Executive Officer. It approves the executive compensation plans as well as approving any major changes to compensation and benefit plans generally including the pension plans, and it administers KESIP, including the granting of options under the plan.

Chair: K.L. Hawkins
Members: W. Dobson, D.S. Macdonald, H.P. Milavsky, W.T. Stephens, J.D. Thompson

Chair's Participation in Committees

Other than with respect to the Executive Committee, on which he was a voting member and the Chair, Mr. Haskayne is a non-voting member of all of the committees of the board.

Directors' and Officers' Liability Insurance

TransCanada maintains Directors' and Officers' Liability Insurance with policy limits of US $150 million in the aggregate, subject to a deductible in respect of corporate reimbursement of US $250,000 for each loss.

Generally, under this insurance, TransCanada is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers, and individual directors and officers (or their heirs and legal representatives) are reimbursed for losses arising during the performance of their duties for which they are not indemnified by TransCanada. Major exclusions from coverage include claims arising from illegal acts, those acts which result in illegal personal profit, violation of any fiduciary duty under the United States of America Employee Retirement Income Security Act of 1974, pollution damage (except for resultant shareholder actions) and claims brought by a director or officer against another director or officer or by TransCanada against a director or officer except for shareholder derivative actions. For the year ended December 31, 1999, the total annual premium in respect of such insurance was $602,585 which was paid entirely by TransCanada.

Shareholder Proposals

Pursuant to Canadian law, shareholder proposals to be considered for inclusion in the management proxy circular for the 2001 annual meeting of holders of common shares of TransCanada (expected to be held in April 2001) must be received by the Corporate Secretary of TransCanada on or before the close of business on January 27, 2001.

Directors' Approval

The contents of this Circular and the sending of it to each shareholder entitled to receive notice of the Meeting, to each director, to the auditors of TransCanada and to the appropriate governmental agencies, have been approved by the board of directors of TransCanada.

Certificate

The foregoing contains no untrue statement of material fact and does not omit to state a material fact that is required to be stated or that is necessary to make a statement not misleading in the light of the circumstances in which it was made.

Douglas D. Baldwin
President and Chief Executive Officer

Russell K. Girling
Senior Vice-President and Chief Financial Officer

Dated at Calgary, Alberta
February 29, 2000

APPENDIX A

TransCanada's Statement of Corporate Governance Practices Under the Guidelines for Improved Corporate Governance Adopted by The Toronto Stock Exchange

Guideline 1	**Board should explicitly assume responsibility for stewardship of the corporation**
Does TransCanada Align?	*Yes*
Description of Approach	*At TransCanada, the board of directors has responsibility for the overall stewardship of the company, establishing the overall policies and standards of TransCanada in the operation of its businesses and reviewing and approving its strategic plans.*
Guideline 1a	**Board should specifically assume responsibility for the adoption of a strategic planning process**
Does TransCanada Align?	*Yes*
Description of Approach	*The board believes that management is primarily responsible for development of corporate strategy. It is the role of the board to review, question, validate and approve material changes in the strategy of TransCanada. The board believes that strategy development is an interactive process between management and the board.* *The board meets on an annual basis for a comprehensive strategic planning session at which time it reviews and approves the strategic plans of TransCanada. The board recognizes that strategic planning is a continuous process and as such the board meets from time to time during the year as strategic plans evolve and require board approval.*
Guideline 1b	**Board should specifically assume responsibility for the identification of principal business risks, and implementation of risk management systems**
Does TransCanada Align?	*Yes*
Description of Approach	*The board is responsible for understanding the principal risks associated with TransCanada's business on an ongoing basis and it is the responsibility of management to assure that the board and its committees are kept well informed of these changing risks on a timely basis.* *The Audit and Risk Management Committee reviews TransCanada's risk management policies and procedures and reports to the board on these matters on a quarterly basis. The board also receives and reviews reports from the Health, Safety and Environment Committee at least three times a year.*
Guideline 1c	**Board should specifically assume responsibility for succession planning, including appointing, training and monitoring senior management**
Does TransCanada Align?	*Yes*
Description of Approach	*The board believes that succession planning and management development are key to the ongoing process that contributes substantially to the success of TransCanada. The CEO provides a detailed report to the Human Resources Committee and a summary presentation to the board on these matters on an annual basis.* *At least once a year, the Human Resources Committee reviews and reports to the board on existing management resources and plans, including recruitment and training programs, for ensuring that qualified personnel will be available for succession to executive officer positions in TransCanada and key officer positions in its major subsidiaries.* *The Human Resources Committee conducts an annual review and assessment of the performance against the objectives of the Chairman and of the CEO, and reviews annually the performance of the senior executive officers of TransCanada and key officers in its major subsidiaries.*

Guideline 1d	**Board should specifically assume responsibility for communications policy**
Does TransCanada Align?	*Yes*
Description of Approach	*The board has put structures in place to ensure effective, timely and non-selective communications between TransCanada, its stakeholders and the public. The board, or the appropriate committee thereof, reviews the content of TransCanada's major communications to shareholders and the investing public, including the quarterly and annual reports, and approves the proxy circular, the annual information form and any prospectuses that may be issued. The disclosed information is released through mailings to shareholders, news wire services, the general media and a home page on the internet.* *The board believes that it is the function of management to speak for TransCanada in its communications with the investment community, the media, customers, suppliers, employees, governments and the general public. It is understood that the chair or other individual directors may from time to time be requested by management to assist with such communications. If communications from stakeholders are made to the chair or to other individual directors, management is informed and consulted to determine any appropriate response.* *TransCanada has an investor relations group which responds to analyst, institutional and individual shareholder inquiries and maintains a toll-free telephone line for ease of contact. Individual queries, comments or suggestions can be made at any time by calling or writing directly to TransCanada's head office in Calgary, Alberta. In addition, TransCanada has a communications group to respond to inquiries from media, government and the public. Together, these groups deal with stakeholder concerns and ensure that all inquiries receive a full and timely response.*
Guideline 1e	**Board should specifically assume responsibility for the integrity of internal control and management information systems**
Does TransCanada Align?	*Yes*
Description of Approach	*TransCanada attempts to achieve a balance between mandating controls related to financial or other matters that give the board reasonable assurances that its responsibilities are discharged and, at the same time, avoiding the creation of an unnecessarily bureaucratic and costly system of control mechanisms.* *The board has created four separate committees, each of which is responsible for reviewing and advising the board on controls related to their specific areas.* *TransCanada's internal controls are monitored on a regular basis by the Audit and Risk Management Committee through management and the work of the internal and external auditors.*
Guideline 2	**Majority of directors should be "unrelated" (independent from management and free from conflicts of interest)**
Does TransCanada Align?	*Yes*
Description of Approach	*The Governance Committee makes a periodic review to determine the existence of any relationships between each director and TransCanada in furtherance of ensuring that the majority of directors are independent and unrelated to TransCanada and, where any relationships exist, the director is acting appropriately.* *The board believes that, as a matter of policy, there should be a majority of outside, unrelated directors on TransCanada's board. To this end, the board has determined the number of officers or senior managers of TransCanada or its subsidiaries who may serve as directors at any one time shall be limited to a maximum of three.* *If the proposed directors are elected to the board, 12 out of 13 directors will be unrelated to TransCanada.*

Guideline 3	**Disclose for each director whether he or she is related, and how that conclusion was reached**
Does TransCanada Align?	*Yes*
Description of Approach	*Douglas D. Baldwin, President and CEO of TransCanada is a related director.* *For the remainder of the proposed directors, each of them is independent of management, none has any interest, business or other relationship that could or could reasonably be perceived to materially interfere with his or her ability to act in the best interests of TransCanada and, except for the Chair and Vice-Chair, none has received remuneration from TransCanada in excess of directors' fees.* *— Ronald B. Coleman — unrelated* *— Dominic D'Alessandro — unrelated* *— Wendy Dobson — unrelated* *— Richard F. Haskayne — unrelated* *— Kerry L. Hawkins — unrelated* *— Donald S. Macdonald — unrelated* *— J.M. (Jack) MacLeod — unrelated* *— Harold P. Milavsky — unrelated* *— James R. Paul — unrelated* *— Harry G. Schaefer — unrelated* *— W. Thomas Stephens — unrelated* *— Joseph D. Thompson — unrelated*
Guideline 4	**Appoint a committee of outside directors responsible for appointment of new nominees and ongoing assessment of directors**
Does TransCanada Align?	*Yes*
Description of Approach	*The Governance Committee annually reviews the general and specific criteria applicable to candidates to be considered for nomination to the board. The objective of this review is to maintain the composition of the board in a way that provides the best mix of skills and experience to guide the long-term strategy and ongoing business operations of TransCanada.* *The Governance Committee makes recommendations to the board and the board is responsible for identifying suitable candidates to be recommended for election to the board by the shareholders.* *The Governance Committee is responsible for the assessment of the performance of individual directors.*
Guideline 5	**Implement a committee process for assessing the effectiveness of the board, its committees and the contribution of individual directors**
Does TransCanada Align?	*Yes*
Description of Approach	*The Governance Committee is responsible to make an annual assessment of the overall performance of the board and its individual members and to report its findings to the board. A questionnaire was utilized as part of this process.* *The assessment examines the effectiveness of the board as a whole and specifically reviews areas that the board and/or management believe could be improved to ensure the continued effectiveness of the board in the execution of its responsibilities.* *The Governance Committee also makes recommendations relative to the composition of the various committees of the board.*
Guideline 6	**Provide orientation and education programs for new recruits to the board**
Does TransCanada Align?	*Yes*
Description of Approach	*New directors are provided with an orientation and education program that includes written information about the duties and obligations of directors, the business and operations of TransCanada, documents from recent board meetings, and opportunities for meetings and discussion with senior management and other directors. The details of the orientation of each new director will be tailored to that director's individual needs and areas of interest.*

Guideline 7	**Examine size of board, with a view to improving effective decision-making and, if appropriate, undertake a program to reduce the number of directors**
Does TransCanada Align?	*Yes*
Description of Approach	*Although the maximum number of directors permitted by TransCanada's Articles is 20, the board has determined that, at present, it is in the best interests of TransCanada to maintain a smaller board, in the range of 12 to 14. It is the board's belief that this range is currently sufficient to provide a diversity of expertise and opinions and allow effective committee organization, yet small enough for efficient meetings and decision-making.* *The Governance Committee is mandated to review the size of the board from time to time and recommends changes in size to the board when appropriate.*
Guideline 8	**Review adequacy and form of compensation of directors to ensure compensation reflects risks and responsibilities**
Does TransCanada Align?	*Yes*
Description of Approach	*The Governance Committee reviews the compensation of the directors on an annual basis, taking into account such matters as time commitment, responsibility and compensation provided by comparable companies.*
Guideline 9	**Committees should generally be composed of outside directors a majority of which are unrelated**
Does TransCanada Align?	*Yes*
Description of Approach	*The board believes that, as a matter of policy, there should be a majority of unrelated directors on each of the committees. The mandates of the Governance Committee and the Audit and Risk Committee state that they be composed entirely of unrelated directors.*
Guideline 10	**Appoint a committee responsible for developing an approach to corporate governance issues**
Does TransCanada Align?	*Yes*
Description of Approach	*The mandate of the Governance Committee includes responsibility to undertake initiatives as are needed to help deliver pre-eminent corporate governance.*
Guideline 11a	**Define limits to management's responsibilities by developing position descriptions for:** (i) **the board**
Does TransCanada Align?	*Yes*
Description of Approach	*The board of directors has plenary power. Any responsibility not delegated to management or a committee of the board remains with the board. However, the board has adopted its own terms of reference which were prepared to assist the board and management in clarifying responsibilities and ensuring effective communication between the board and management.* (ii) **the CEO**
Does TransCanada Align?	*Yes*
Description of Approach	*The board reviews terms of reference for the position of the CEO on an annual basis which defines the CEO's duties and responsibilities. These duties include:* *— the development and recommendation of strategic plans to the board that ensure TransCanada's profitable growth and overall success and includes involving the board in the early stages of strategy development;* *— reporting regularly to the board on the overall progress and results against operating and financial objectives;* *— keeping the board fully informed on all aspects of TransCanada's operational and financial affairs;* *— the authorization of the commitment of funds to capital projects not included in a budget nor approved by the board to a maximum of Cdn. $25 million which are then submitted to the board for ratification at the next scheduled meeting; and* *— the commitment of corporate resources and entrance into agreements in the ordinary course of business in order to pursue the approved strategies of TransCanada with the proviso that major commitments, exposures and risks are reported to the board on a regular and timely basis.*

Guideline 11b	**Board should approve or develop corporate objectives which the CEO is responsible for meeting**
Does TransCanada Align?	*Yes*
Description of Approach	*The Human Resources Committee conducts an annual review of the performance of the CEO as measured against objectives established mutually in the prior year by the Human Resources Committee and the CEO. The results of this annual review are communicated to the board's unrelated directors who then make an evaluation of the overall performance of the CEO. This performance evaluation is communicated to the CEO by the Chair and the Chair of the Human Resources Committee. The evaluation is used by the Human Resources Committee in its deliberations concerning the CEO's annual compensation.* *One of the CEO's objectives is to annually establish a board approved plan for senior management development and succession.*
Guideline 12	**Establish procedures to enable the board to function independently of management**
Does TransCanada Align?	*Yes*
Description of Approach	*The Governance Committee has the responsibility to ensure that the board functions independently of management. The Governance Committee's responsibilities includes the review of TransCanada's structures and procedures to ensure the board is able to, and in fact is, functioning independently of management. In addition, the Governance Committee monitors the quality of the relationship between management and the board and recommends improvements as deemed necessary or desirable.* *Directors of TransCanada who are not members of management meet regularly to discuss matters of interest independent of any management influence.* *The Chair is appointed by the board in a non-executive capacity. In the event that a Chair is appointed in an executive capacity, the board will appoint an unrelated director to serve in the capacity of "Lead Director" whose responsibility would be to ensure that the board can function independent of management.*
Guideline 13	**Establish an audit committee composed only of outside directors with specifically defined roles and responsibilities**
Does TransCanada Align?	*Yes*
Description of Approach	*The mandate of the Audit and Risk Management Committee includes:* — *review, discuss with management, and recommend to the board TransCanada's interim and annual financial statements, annual report, annual information form including management's discussion and analysis and the annual proxy circular;* — *a semi-annual report to the board on TransCanada's obligation pursuant to warranties of performance and guarantees, securing the performance of payment by wholly owned subsidiaries of any indebtedness, liability or obligation;* — *review of audit plans of the internal and external auditors including a review of the internal audit procedures and the independence of external auditors.* — *review of the annual post-audit or management letter from the external auditor and management's response and follow-up in respect of any identified weakness;* — *meeting with the external and internal auditors independently of management; and* — *review issues relating to legal and regulatory responsibilities to monitor TransCanada's efforts to ensure compliance.*
Guideline 14	**Implement a system to enable individual directors to engage outside advisors at the corporation's expense**
Does TransCanada Align?	*Yes*
Description of Approach	*TransCanada recognizes that occasionally individual directors may need the services of an advisor or expert to assist on matters involving their responsibilities as board members. The board has determined that any director who wishes to engage an outside advisor at the expense of TransCanada may do so if he or she first obtains authorization of the Governance Committee.*

The Management Proxy Circular dated March 2, 1999 for TransCanada's last annual meeting has been filed with the securities commissions or similar authorities in Canada. The Annual Information Form of TransCanada for the year ended December 31, 1999, dated February 29, 2000, will be filed prior to March 31, 2000 with the securities commissions or similar authorities in Canada, and under cover of Form 40-F/A with the U.S. Securities and Exchange Commission. The 1999 Management Proxy Circular and the Annual Information Form for the year ended December 31, 1999 will be available on or about March 31, 2000 (without charge to holders of common shares of TransCanada) upon request to the Corporate Secretary of TransCanada PipeLines Limited, P.O. Box 1000, Station "M", Calgary, Alberta, T2P 4K5.

Canadian Mail Service Interruption: If there is a mail service interruption in Canada prior to mailing by a shareholder of a completed proxy to TransCanada's transfer agent, Montreal Trust, it is recommended that the shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of Montreal Trust:

Alberta
530 - 8th Avenue S.W., Suite 600
Calgary

British Columbia
510 Burrard Street, 2nd Floor
Vancouver

Saskatchewan
1783 Hamilton Street, Suite 660
Regina

Manitoba
200 Portage Avenue
Winnipeg

Ontario
151 Front Street, W., 8th Floor
Toronto

Québec
1800 McGill College Avenue, 6th Floor
Montréal

Nova Scotia
1465 Brenton Street, 5th Floor
Halifax

QUEBECOR MERRILL
CANADA INC
Printed in Canada
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TransCanada PipeLines

six month report to shareholders june 30, 1976

TO OUR SHAREHOLDERS:

Net income applicable to common shares for the first half of 1976 was $31,711,000, or 93¢ per share compared with 68¢ for the same period in 1975. During this period TransCanada earned a rate of return on rate base slightly less than the 10.2% which the National Energy Board determined was fair and reasonable effective December, 1975.

Operating revenues of $714 million are significantly higher than for the comparable period in 1975 reflecting the increased field cost of natural gas.

The increase in the dividend rate on common shares from 18¢ to 22¢ for the second quarter has encouraged substantial conversions of the $125 million $2.65 convertible preferred share issue. To date $77.5 million of these shares have been converted to common shares. These conversions are expected to continue during this year to significantly improve your Company's common equity base. There are now 37,221,278 common shares outstanding, 16% above the number of shares at the end of last year.

Following agreement by the Federal and Alberta governments, new prices for sale of natural gas in Canada were prescribed for the period July 1 to December 31, 1976. The Toronto City Gate reference price was increased from $1.25 to $1.405 per million BTU's (Mcf). This entire price increase, except for TransCanada's additional fuel costs, will accrue to the western Canadian producers of natural gas. It is hoped that these additional payments, after taking into account royalties and taxes, will encourage the producers to maintain a high level of exploration activity in western Canada.

On July 19, 1976, TransCanada filed an application with the National Energy Board for new rates to become effective January 1, 1977. This application is intended to allow TransCanada to recover increases in the cost of service, and to increase its authorized rate of return from 10.2% to 10.8%. This rate hearing is scheduled to commence August 24, 1976.

In order to implement the policy of the Government of Canada to allow for reasonable growth in the Canadian natural gas market, TransCanada has obtained information from its customers on additional market requirements for 1978. As a result, an application will be filed in the near future to request authority for construction of new facilities in 1977 to service these additional Canadian markets. If the Government policy is carried out and sufficient volumes of new gas supplies fail to develop before frontier gas is available, some curtailment of existing export markets may be necessary. However, TransCanada is confident that its present gas supply is adequate to meet all of its Canadian customer requirements and the existing level of export commitments for this year and for 1977.

July 26, 1976
Toronto, Canada

Chairman and Chief Executive Officer

TransCanada PipeLines

CONSOLIDATED STATEMENT OF INCOME (unaudited)

Six months ended June 30 (thousands of dollars)	1976	1975
Operating revenues	$714,077	$410,408
Operating expenses		
Cost of gas sold, gathering charges and acquisition costs	520,989	262,925
Transmission by other companies	48,454	36,058
Operation and maintenance	26,792	17,533
Compressor fuel – gas and electric	23,134	11,640
Depreciation	23,873	18,901
Taxes – provincial and municipal	5,388	4,256
	648,630	351,313
Operating income	65,447	59,095
Other income		
Allowance for funds used during construction	1,056	501
Equity in net income of Great Lakes Gas Transmission Company	4,064	3,355
Other (net)	2,412	376
	7,532	4,232
Income before financial charges	72,979	63,327
Financial charges (net)	35,027	34,957
Net income	37,952	28,370
Provision for dividends on preferred shares	6,241	7,024
Net income applicable to common shares	$ 31,711	$ 21,346
Net income per common share		
Basic	$ .93	$ .68
Fully diluted	.85	.61
Average common shares outstanding	34,170,375	31,515,817
Volumes delivered for sale and transportation (billions of cubic feet)	568	556

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION (unaudited)

Six months ended June 30 (thousands of dollars)	1976	1975
Source of funds		
Funds provided from operations	$ 59,802	$45,344
Refund of advance payments on future gas supply	—	839
Dividends from Great Lakes Gas Transmission Company	6,665	1,739
Net proceeds from issue of securities	50,338	48,691
	$116,805	$ 96,613
Use of funds		
Additions to gas transmission plant (net)	$ 21,522	$ 10,377
Arctic pipe line projects	887	867
Reduction of long-term debt	33,665	23,081
Reduction of notes payable	20,000	37,730
Purchase and cancellation of preferred shares	1,571	1,136
Dividends on preferred and common shares	19,651	17,408
Other (net)	625	535
Increase in working capital	18,884	5,479
	$116,805	$ 96,613

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TransCanada PipeLines

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the Annual Meeting of Shareholders of TransCanada PipeLines Limited will be held in the Ontario Room of the Royal York Hotel, in the City of Toronto, in the Province of Ontario, on Wednesday, the 14th day of April, 1976 at the hour of ten o'clock in the forenoon, Toronto Time, for the purposes of: (a) receiving the Report of the Directors for the year ended December 31, 1975, containing the Consolidated Balance Sheet, the Consolidated Statements of Income, Retained Earnings, Contributed Surplus, and Changes in Financial Position; and the Report of the Auditors; (b) appointing Auditors and authorizing the Directors to fix their remuneration; (c) electing Directors; and (d) transacting such other business as may properly be brought before the meeting or any adjournment thereof; and it is requested that each person entitled to attend the meeting forward the attached instrument of proxy duly completed in the envelope provided to ensure representation whether or not such person is able personally to attend such meeting.

DATED at Toronto, Ontario this 15th day of March, 1976.

By order of the Board,

D. M. JOHNSTON,
Corporate Secretary.

MANAGEMENT PROXY CIRCULAR

SOLICITATION OF PROXIES

This Management Proxy Circular is furnished by the management of TransCanada PipeLines Limited (hereinafter referred to as the "Company") to be used at the Annual Meeting of Shareholders of the Company to be held on the 14th day of April, 1976 and at any adjournment or adjournments thereof (hereinafter referred to as the "Meeting") for the purposes set forth in the foregoing notice of the Meeting.

The proxy accompanying this Management Proxy Circular is solicited by the management of the Company. Such proxy when properly executed, duly returned to the management of the Company and not revoked will be voted in accordance with instructions contained therein. **If no instructions are given with respect to the particular matter to be acted upon, proxies will be voted in favour of such matter.** Proxies will be voted on any ballot that may be called for and where instructions are given with respect to a particular matter to be acted upon proxies will be voted or withheld from voting in accordance with such instructions. Each such form of proxy may be revoked by the shareholder at any time before it is exercised.

The persons designated in the enclosed form of proxy are officers of the Company. A shareholder desiring to appoint some other person to represent him at the Meeting has the right to do so by deleting the names of the persons designated and by inserting such other person's name in the blank space provided in the form of proxy.

The cost of preparing, assembling and mailing this Management Proxy Circular, the notice of the Meeting, the enclosed form of proxy and additional material relating to the Meeting which may be furnished to shareholders by the management of the Company subsequent to the furnishing of the Management Proxy Circular has been or is to be borne by the Company. It is expected that the solicitation will be primarily by mail, but proxies may also be solicited personally or by telephone by regular employees of the Company.

RECORD DATE

The Board of Directors of the Company has fixed the 15th day of March, 1976 as the record date as of which common shareholders of the Company entitled to vote at the Meeting will be determined.

REVOCABILITY OF PROXY

A shareholder giving a proxy may revoke the proxy by instrument in writing executed by the shareholder or by his attorney authorized in writing, or, if the shareholder is a corporation, under its corporate seal or by an officer or attorney thereof duly authorized, and deposited either at the head office of the Company at any time up to and including the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used or with the Chairman of the Meeting on the day of the Meeting or adjournment thereof.

VOTING SHARES

The holders of the Company's issued common shares of record at the close of business on the 15th day of March, 1976 will be entitled to vote at the Meeting. Each such holder will be entitled to one vote for each share held. The number of outstanding common shares entitled to vote at the Meeting as at March 15th, 1976 is 32,067,357 common shares.

As at March 15, 1976, the only person or company to the knowledge of the directors or officers of the Company who or which beneficially owns, directly or indirectly, or exercises control or direction over shares carrying more than 10% of the votes attached to all shares of the Company is Canadian Pacific Investments Limited, which beneficially owns directly or indirectly and exercises control or direction over 4,501,457 of the Company's outstanding common shares (representing 14.04% of all outstanding common shares).

ELECTION OF DIRECTORS

The persons named in the enclosed form of proxy intend to vote at the Meeting for the election of the nominees whose names are set forth below, all of whom, with the exception of John H. C. Clarry, Q.C., and Russell E. Harrison, are now directors of the Company and have been since the dates indicated. Should any nominee named below for the office of director become unable or unwilling to accept nomination for election, the persons designated in the enclosed form of proxy intend to vote for the election in his stead of such person as the management of the Company may recommend. Management of the Company has no reason to believe that any of the nominees named below will be unable or unwilling to serve if elected to office. Each director elected will hold office until the next Annual Meeting of Shareholders of the Company or until his successor is duly elected.

The following table states the names of all persons proposed to be nominated for election as directors, all other major positions and offices with the Company now held by them, their principal occupations or employments, the year in which they became directors of the Company, in those cases where they are presently directors of the Company, and the approximate number of shares of each class of shares of the Company beneficially owned, directly or indirectly, by each of them or over which control or direction is exercised by each of them, as at March 15, 1976.

	Became Director	Common Shares (Notes)
Robert W. Campbell, of Calgary, Alberta, is Chairman of the Board and Chief Executive Officer of PanCanadian Petroleum Limited, Calgary.	June 8, 1961	103
John H. C. Clarry, Q.C., of Toronto, Ontario, has been for at least the past five years and is a Partner of Messrs. McCarthy & McCarthy, Barristers and Solicitors, Toronto.	—	300
John H. Coleman, of Toronto, Ontario, is President of J. H. C. Associates Limited, Toronto.	Mar. 4, 1970	300
A. Jean de Grandpré, Q.C., of Montreal, Quebec, is President of Bell Canada, Montreal.	Mar. 7, 1973	600
Russell E. Harrison, of Toronto, Ontario, has been since December 11, 1973 and is President and Chief Operating Officer, Canadian Imperial Bank of Commerce, Toronto. Prior thereto and since August 1969 he was Executive Vice President and Chief General Manager of Canadian Imperial Bank of Commerce.	—	400
James W. Kerr, of Toronto, Ontario, is Chairman and Chief Executive Officer of the Company.	Dec. 3, 1958	7,803
A. Deane Nesbitt, O.B.E., D.F.C., of Montreal, Quebec, is President and Chief Executive Officer of Nesbitt, Thomson and Company, Limited, Montreal and of Nesbitt Thomson Securities Limited, Montreal.	Apr. 30, 1954	5,081
Gordon P. Osler, of Toronto, Ontario, is Vice-Chairman of the Board of Directors and Chief Executive Officer of British Steel Corporation (Canada) Limited, Hamilton and Chairman of the Board of Directors of Slater Steel Industries Limited, Hamilton.	Apr. 30, 1954	420
Herbert C. Pinder, of Saskatoon, Saskatchewan, is Secretary-Treasurer and a director of The Saskatoon Drug & Stationery Company Limited, Saskatoon, and President of Saskatoon Trading Company Limited, Saskatoon.	Apr. 13, 1971	300
Smiley Raborn, Jr., of Calgary, Alberta, is President and Chief Executive Officer of CanDel Oil Ltd., Calgary.	Jan. 26, 1961	12,030
Frank A. Schultz, of Dallas, Texas, is an independent oil operator.	Apr. 13, 1951	2,586

	Became Director	Common Shares (Notes)
Ian D. Sinclair, Q.C., of Montreal, Quebec, is Chairman of the Board of Directors and Chief Executive Officer of Canadian Pacific Limited, Montreal.	Oct. 11, 1966	300
John M. Taylor, of Calgary, Alberta, is President of PanCanadian Petroleum Limited, Calgary.	Apr. 13, 1971	300
J. Ross Tolmie, Q.C., of Ottawa, Ontario, is the Senior Partner of Herridge, Tolmie, Barristers and Solicitors, Ottawa.	Apr. 13, 1951	35,295
George W. Woods, of Toronto, Ontario, is President of the Company.	Dec. 10, 1968	4,000

Notes (1) In addition to the holdings of common shares set forth above, the following directors own, directly or indirectly and exercise control or direction over the following number of preference shares of the Company. $2.65 cumulative redeemable convertible second preferred shares Series A: A. D. Nesbitt 1200; G. P. Osler 100; J. R. Tolmie 50. $4.50 cumulative redeemable retractable first preferred shares Series B: A. D. Nesbitt 1,000.

(2) The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by the respective nominee directors individually.

REMUNERATION OF DIRECTORS AND OFFICERS

During the fiscal year ended December 31, 1975, remuneration, as set forth in the table below, was paid by the Company to its directors and officers. Officers of the Company who are also directors do not receive directors' fees. Directors and officers of the Company do not receive remuneration from any affiliate of the Company.

	Nature of Remuneration Earned		
	Directors' Fees	Salaries	Total
Remuneration of Directors who are not officers Number of Directors: 13	$102,000	—	$ 102,000
Remuneration of Officers Number of Officers: 18	—	1,028,000	1,028,000
Totals:	$102,000	1,028,000	$1,130,000

Note: There were no bonuses, non accountable expense allowance or other form of remuneration paid by the Company or its affiliates.

The estimated aggregate cost to the Company and its subsidiaries in the fiscal year ended December 31, 1975 of all pension benefits proposed to be paid under any pension or retirement plan in the event of retirement at normal retirement age, directly or indirectly, by the Company or any of its subsidiaries to directors and officers is $44,957.

The maximum annual aggregate of all remuneration payments other than the foregoing proposed to be paid in the future to directors and officers of the Company pursuant to any existing plans or arrangements is $50,000.

As at March 15, 1976, J. K. Archambault, and N. E. Frost, officers of the Company, are indebted to the Company on account of loans in connection with the purchase of their residences. The largest aggregate amount of such indebtedness since January 1, 1975 and the present balance and rate of interest of such indebtedness with respect to Mr. Archambault are $60,000, $59,849 and 7% respectively and with respect to Mr. Frost are $19,554, $18,616 and 7%, respectively.

INCENTIVE STOCK OPTION PLAN

At March 15, 1976, 303,403 common shares of the Company were reserved for the exercise of options granted or to be granted under the Company's Incentive Stock Option Plan to purchase common shares at a price per share equal to the average of closing bid prices of the common shares on the Vancouver, Alberta, Winnipeg, Toronto and Montreal Stock Exchanges on the day of grant. Since January 1, 1975, stock options have been granted as at March 15, 1976 to directors and officers of the Company as a group pursuant to such Plan as set out below:

Number of Common Shares Optioned	Date of Grant of Option	Date of Expiry of Option	Purchase Price Per Share	Price Range of Common Shares on Toronto Stock Exchange in the thirty-day period preceding date of grant — Low	High
22,500	April 2, 1975	April 2, 1985	$10.542	$10.625	$11.75

of the Company pursuant to stock options granted to them under the Plan as set out below:

Number of Common Shares Purchased	Quarterly Period	Purchase Price Range per Share per Quarter		Price Range of Common Shares on Toronto Stock Exchange in thirty-day period preceding dates of purchase	
		Low	High	Low	High
9,000	Jan. 1-Mar. 31, 1975	8.573	8.573	10.250	11.625
4,900	Jan. 1-Mar. 15, 1976	8.729	9.95	10.375	13.00

APPOINTMENT OF AUDITORS

The persons designated in the enclosed form of proxy intend to vote for the appointment of Messrs. Peat, Marwick, Mitchell & Co., Chartered Accountants, Toronto, Ontario, as Auditors of the Company, to hold office until the Annual Meeting of the Shareholders of the Company to be held in 1977 and to authorize the Board of Directors of the Company to fix the remuneration of such Auditors. Messrs. Peat, Marwick, Mitchell & Co. have been the Auditors of the Company for more than five years.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS OF THE COMPANY

On January 10, 1975, the Company entered into an underwriting agreement with Nesbitt Thomson Securities Limited, Wood Gundy Limited, McLeod, Young, Weir & Company Limited and Midland Doherty Limited, as underwriters, pursuant to which the Company sold and the said underwriters purchased on January 30, 1975 $50,000,000 principal amount of 11½% sinking fund debentures series F due January 20, 1995 at a price of $97.55 for $100 principal amount thereof. Mr. A. Deane Nesbitt, a director of the Company, is an officer, director and shareholder of Nesbitt Thomson Securities Limited.

On January 28, 1976, the Company entered into an agreement with Canadian Imperial Bank of Commerce and The Royal Bank of Canada, pursuant to which the Company sold and each bank purchased $25,000,000 aggregate principal amount of 7¼% Income Debentures at and for a total purchase price of $25,000,000. Mr. J. W. Kerr, a director of the Company, and Mr. R. E. Harrison, a nominee director of the Company, are directors and shareholders of Canadian Imperial Bank of Commerce and Messrs. J. H. Coleman, Herbert C. Pinder and Ian D. Sinclair, directors of the Company, are directors and shareholders of The Royal Bank of Canada.

In the ordinary course of its business the Company purchases natural gas at competitive prices from many producers in western Canada, including CanDel Oil Ltd., and PanCanadian Petroleum Limited. Mr. Smiley Raborn, Jr., a director of the Company, is an officer, director and shareholder of CanDel Oil Ltd. Mr. Robert W. Campbell, Mr. Ian D. Sinclair and Mr. John M. Taylor, directors of the Company, are officers, directors and shareholders of PanCanadian Petroleum Limited.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Company purchased, as of October 1, 1975, insurance with respect to its obligations to indemnify its directors and officers against major liabilities which could be incurred by them in their respective capacities as directors or officers. The total amount of such insurance purchased for directors as such and for officers as such is $10,000,000 subject to a $10,000 deductible clause per occurrence. The net amounts of premium charged to income of the Company during the fiscal period ended December 31, 1975 in respect of directors as a group and officers as a group were $1,845 and $2,614, respectively. During the same period, the amounts of premium paid by directors as a group and officers as a group for insurance against liabilities which could be incurred by them in their respective capacities as directors or officers of the Company was $276 and $391, respectively.

OTHER BUSINESS

The enclosed form of proxy confers discretionary authority upon the persons named therein with respect to other matters which may properly come before the Meeting. At the present time, the management of the Company knows of no other matters to come before the Meeting. If any such matters properly come before the Meeting, however, it is the intention of the persons designated in the enclosed form of proxy to vote in accordance with their judgment on such matters.

DIRECTORS APPROVAL

The contents of this Management Proxy Circular and the sending thereof have been approved by the directors of the Company.

D. M. Johnston
Corporate Secretary

Toronto, Ontario.
March 15, 1976

TransCanada PipeLines

NOTICE OF ANNUAL AND SPECIAL GENERAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the Annual and a Special General Meeting of Shareholders of TransCanada PipeLines Limited will be held in the Ontario Room of the Royal York Hotel, in the City of Toronto, in the Province of Ontario, on Wednesday, the 13th day of April, 1977 at the hour of ten o'clock in the forenoon, Toronto Time, for the purposes of:

(a) receiving the Report of the Directors for the year ended December 31, 1976, containing the Consolidated Balance Sheet, the Consolidated Statements of Income, Retained Earnings, Contributed Surplus, and Changes in Financial Position and the Report of the Auditors; (b) appointing Auditors and authorizing the Directors to fix their remuneration; (c) considering and, if thought fit, sanctioning and confirming (subject to such changes, if any, as may be approved by the meeting) By-law No. 30, being a by-law increasing the number of directors of the Company from 15 to 16; (d) electing Directors; and (e) transacting such other business as may properly be brought before the meeting or any adjournment thereof. As to the confirmation of By-law No. 30, referred to in item (c) above, the meeting will be constituted as a Special General Meeting of Shareholders.

It is requested that each person entitled to attend the meeting forward the attached instrument of proxy duly completed in the envelope provided to ensure representation whether or not such person is able personally to attend such meeting.

DATED at Toronto, Canada this 14th day of March, 1977.

By order of the Board,

D. M. JOHNSTON,
Corporate Secretary.

MANAGEMENT PROXY CIRCULAR

SOLICITATION OF PROXIES

This Management Proxy Circular is furnished by the management of TransCanada PipeLines Limited (hereinafter referred to as the "Company") to be used at the Annual and Special General Meeting of Shareholders of the Company to be held on the 13th day of April, 1977 and at any adjournment or adjournments thereof (hereinafter referred to as the "Meeting") for the purposes set forth in the foregoing notice of the Meeting.

The proxy accompanying this Management Proxy Circular is solicited by the management of the Company. Such proxy when properly executed, duly returned to the management of the Company and not revoked will be voted in accordance with instructions contained therein. **If no instructions are given with respect to the particular matter to be acted upon, proxies will be voted in favour of such matter.** Proxies will be voted on any ballot that may be called for and where instructions are given with respect to a particular matter to be acted upon proxies will be voted or withheld from voting in accordance with such instructions. Each such form of proxy may be revoked by the shareholder at any time before it is exercised.

The persons designated in the enclosed form of proxy are officers of the Company. A shareholder desiring to appoint some other person to represent him at the Meeting has the right to do so by deleting the names of the persons designated and by inserting such other person's name in the blank space provided in the form of proxy.

The cost of preparing, assembling and mailing this Management Proxy Circular, the notice of the Meeting, the enclosed form of proxy and additional material relating to the Meeting which may be furnished to shareholders by the management of the Company subsequent to the furnishing of the Management Proxy Circular has been or is to be borne by the Company. It is expected that the solicitation will be primarily by mail, but proxies may also be solicited personally or by telephone by regular employees of the Company.

RECORD DATES FOR VOTING AND FOR DEPOSIT OF PROXIES

The Board of Directors of the Company has fixed the 14th day of March, 1977 as the record date as of which common shareholders of the Company entitled to vote at the Annual Meeting will be determined. There is no record date for determining the common shareholders of the Company entitled to vote at the Special General Meeting and all persons who are registered holders of common shares of the Company at the time of the Special General Meeting will be entitled to vote at such Meeting. Each such holder will be entitled to one vote in respect of the matters on which he or she is entitled to vote, as aforesaid, for each common share held. The Board of Directors, has however, fixed 5:00 p.m. (Toronto Time) on the 12th day of April, 1977 as the time before which proxies to be used at the Meeting must be deposited with the Company or its agent.

REVOCABILITY OF PROXY

A shareholder giving a proxy may revoke the proxy by instrument in writing executed by the shareholder or by his attorney authorized in writing, or, if the shareholder is a corporation, under its corporate seal or by an officer or attorney thereof duly authorized, and deposited either at the head office of the Company at any time up to and including the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used or with the Chairman of the Meeting on the day of the Meeting or adjournment thereof.

VOTING SHARES

The number of outstanding common shares entitled to vote at the Meeting as at March 14, 1977 is 38,476,739 common shares.

As at March 14, 1977, the only person or company to the knowledge of the directors or officers of the Company who or which beneficially owns, directly or indirectly, or exercises control or direction over shares carrying more than 10% of the votes attached to all shares of the Company is Canadian Pacific Investments Limited, which beneficially owns directly or indirectly and exercises control or direction over 4,732,457 of the Company's outstanding common shares (representing 12.30% of all outstanding common shares).

INFORMATION REGARDING BY-LAW NO. 30

The purpose of By-law No. 30 is to increase the number of directors of the Company from 15 to 16. The text of the By-law appears on page 5.

ELECTION OF DIRECTORS

The Board of Directors presently consists of 15 directors, and if By-law No. 30 is confirmed at the Special General Meeting, will consist of 16 directors to be elected annually. The persons named in the enclosed form of proxy intend to vote at the Annual Meeting for the election of the nominees whose names are set forth below, all of whom with the exception of James M. Cameron are now directors of the Company and have been since the dates indicated. If By-law No. 30 is not so confirmed, the persons named in the enclosed form of proxy intend to vote for the election of the 15 nominees who are now members of the board. Should any nominee named below for the office of director become unable or unwilling to accept nomination for election, the persons designated in the enclosed form of proxy intend to vote for the election in his stead of such person as the management of the Company may recommend. Management of the Company has no reason to believe that any of the nominees named below will be unable or unwilling to serve if elected to office. Each director elected will hold office until the next Annual Meeting of Shareholders of the Company or until his successor is duly elected.

The following table states the names of all persons proposed to be nominated for election as directors, all other major positions and offices with the Company now held by them, their principal occupations or employments, the year in which they became directors of the Company, where they are presently directors of the Company, and the approximate number of shares of each class of shares of the Company beneficially owned, directly or indirectly, by each of them or over which control or direction is exercised by each of them, as at March 14, 1977.

	Became Director	Common Shares (Notes)
Robert W. Campbell, of Calgary, Alberta, is Chairman of the Board and Chief Executive Officer of PanCanadian Petroleum Limited, Calgary.	June 8, 1961	103
James M. Cameron, of Toronto, Ontario has been Executive Vice-President of the Company since April 1, 1975. Prior to that time and since August, 1972 he was a Group Vice-President of the Company, and prior to August, 1972 and since September 1968 he was Vice-President and General Counsel of the Company.	—	1,060

which result in personal profit. For the year ended December 31, 1976, the total annual premium in respect of such insurance was $26,752; of such premium, $10,409 and $13,611 in respect of directors as a group and officers as a group was charged to income while $1,224 and $1,508 was paid by such directors and officers.

OTHER BUSINESS

The enclosed form of proxy confers discretionary authority upon the persons named therein with respect to amendments or variations to By-law No. 30 to be presented to the Meeting and with respect to other matters which may properly come before the Meeting. At the present time, the management of the Company knows of no other matters to come before the Meeting. If any such matters properly come before the Meeting, however, it is the intention of the persons designated in the enclosed form of proxy to vote in accordance with their judgment on such matters.

DIRECTORS APPROVAL

The contents of this Management Proxy Circular and the sending thereof have been approved by the directors of the Company.

D. M. Johnston
Corporate Secretary

Toronto, Canada
March 14, 1977

BY-LAW NO. 30

Being a By-law to increase the number of Directors.

BE IT ENACTED AND IT IS HEREBY ENACTED as a By-law of TransCanada PipeLines Limited (hereinafter called the "Company") that:

1. Effective April 13, 1977, the number of Directors of the Company be and the same is hereby increased from fifteen (15) to sixteen (16) so that the Board of Directors of the Company shall thereafter be composed of sixteen (16) Directors.
2. All prior by-laws of the Company inconsistent herewith are hereby repealed in order to give effect to this by-law.

ENACTED this 2nd day of March, 1977.

WITNESS the Corporate Seal of the Company

(s) J. W. Kerr
Chairman and Chief Executive Officer

(s) D. M. Johnston (c/s)
Corporate Secretary

(**Note:** The percentage of votes required for the approval of By-Law No. 30 is at least two-thirds of the votes cast at the Special General Meeting).

	Became Director	Shares (Notes)
John H. C. Clarry, Q.C., of Toronto, Ontario, is a Partner of Messrs. McCarthy & McCarthy, Barristers and Solicitors, Toronto.	Apr. 14. 1976	300
John H. Coleman, of Toronto, Ontario, is President of J. H. C. Associates Limited, Toronto.	Mar. 4, 1970	300
A. Jean de Grandpré, Q.C., of Montreal, Quebec, is Chairman and Chief Executive Officer of Bell Canada, Montreal.	Mar. 7, 1973	600
Russell E. Harrison, of Toronto, Ontario, is Chairman and Chief Executive Officer of Canadian Imperial Bank of Commerce, Toronto.	Apr. 14, 1976	400
James W. Kerr, of Toronto, Ontario, is Chairman and Chief Executive Officer of the Company.	Dec. 3, 1958	7,803
A. Deane Nesbitt, O.B.E.,D.F.C., of Montreal, Quebec, is President and Chief Executive Officer of Nesbitt, Thomson and Company, Limited, Montreal and of Nesbitt Thomson Securities Limited, Montreal.	Apr. 30, 1954	5,081
Gordon P. Osler, of Toronto, Ontario, is Vice-Chairman of the Board of Directors and Chief Executive Officer of British Steel Corporation (Canada) Limited, Hamilton and Chairman of the Board of Directors of Slater Steel Industries Limited, Hamilton.	Apr. 30, 1954	750
Herbert C. Pinder, of Saskatoon, Saskatchewan, is Secretary-Treasurer and a director of The Saskatoon Drug & Stationery Company Limited, Saskatoon, and President of Saskatoon Trading Company Limited, Saskatoon.	Apr. 13, 1971	300
Smiley Raborn, Jr., of Calgary, Alberta, is President and Chief Executive Officer of CanDel Oil Ltd., Calgary.	Jan. 26, 1961	12,030
Frank A. Schultz, of Dallas, Texas, is an independent oil operator.	Apr. 13, 1951	2,586
Ian D. Sinclair, Q.C., of Montreal, Quebec, is Chairman and Chief Executive Officer of Canadian Pacific Limited, Montreal.	Oct. 11, 1966	300
John M. Taylor, of Calgary, Alberta, is President of PanCanadian Petroleum Limited, Calgary.	Apr. 13,1971	300
J. Ross Tolmie, Q.C., of Ottawa, Ontario, is the Senior Partner of Herridge, Tolmie, Barristers and Solicitors, Ottawa.	Apr. 13, 1951	35,460
George W. Woods, of Toronto, Ontario, is President of the Company.	Dec. 10, 1968	6,000

Notes (1) In addition to the holdings of common shares set forth above, the following director owns directly or indirectly and exercises control or direction over the following number of preference shares of the Company. $4.50 cumulative redeemable retractable first preferred shares Series B: A. D. Nesbitt 1,000

(2) The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by the respective nominee directors individually.

REMUNERATION OF DIRECTORS AND OFFICERS

During the fiscal year ended December 31, 1976, remuneration, as set forth in the table below, was paid by the Company to its directors and officers. Officers of the Company who are also directors do not receive directors' fees. Directors and officers of the Company do not receive remuneration from any affiliate of the Company.

	Nature of Remuneration Earned		
	Directors' Fees	Salaries	Total
Remuneration of Directors who are not officers Number of Directors: 14	$110,900	—	$ 110,900
Remuneration of Officers Number of Officers: 18	—	1,071,700	1,071,700
Totals:	$110,900	1,071,700	$1,182,600

Note: There were no bonuses, non accountable expense allowance or other form of remuneration paid by the Company or its affiliates.

The estimated aggregate cost to the Company and its subsidiaries in the fiscal year ended December 31, 1976 of all pension benefits proposed to be paid under any pension or retirement plan in the event of retirement at normal retirement age, directly or indirectly, by the Company or any of its subsidiaries to directors and officers is $47,589.

The maximum annual aggregate of all remuneration payments other than the foregoing proposed to be paid in the future by the Company or any of its subsidiaries to directors and officers of the Company pursuant to any existing plans or arrangements is $50,000.

As at March 14, 1977, J. K. Archambault, an officer of the Company, is indebted to the Company on account of a loan in connection with the purchase of his residence. The largest aggregate amount of such indebtedness since January 1, 1976 and the present balance and rate of interest of such indebtedness with respect to Mr. Archambault are $60,000, $58,906 and 7% respectively.

INCENTIVE STOCK OPTION PLAN

At March 14, 1977, 305,828 common shares of the Company were reserved for the exercise of options granted or to be granted under the Company's Incentive Stock Option Plan to purchase common shares at a price per share equal to the average of closing bid prices of the common shares on the Vancouver, Alberta, Winnipeg, Toronto and Montreal Stock Exchanges on the day of grant. Since January 1, 1976, stock options have been granted as at March 14, 1977 to directors and officers of the Company as a group pursuant to such Plan as set out below:

Number of Common Shares Optioned	Date of Grant of Option	Date of Expiry of Option	Purchase Price Per Share	Price Range of Common Shares on Toronto Stock Exchange in the thirty-day period preceding date of grant	
				Low	High
31,500	May 19, 1976	May 19, 1986	$12.375	$11.375	$12.75

From January 1, 1976 to March 14, 1977, directors and officers of the Company purchased common shares of the Company pursuant to stock options granted to them under the Plan as set out below:

Number of Common Shares Purchased	Quarterly Period	Purchase Price Range per Share per Quarter		Price Range of Common Shares on Toronto Stock Exchange in thirty-day period preceding dates of purchase	
		Low	High	Low	High
7,900	Jan. 1-Mar. 31, 1976	$8.729	$ 9.95	$10.375	$13.00
3,000	Apr. 1-June 30, 1976	9.95	9.95	11.375	12.75
11,275	July 1-Sept. 30, 1976	8.729	10.778	11.75	13.00
41,000	Jan. 1-Mar. 14, 1977	9.95	10.472	12.125	13.25

APPOINTMENT OF AUDITORS

The persons designated in the enclosed form of proxy intend to vote at the Annual Meeting for the appointment of Messrs. Peat, Marwick, Mitchell & Co., Chartered Accountants, Toronto, Ontario, as Auditors of the Company, to hold office until the Annual Meeting of the Shareholders of the Company to be held in 1978 and to authorize the Board of Directors of the Company to fix the remuneration of such Auditors. Messrs. Peat, Marwick, Mitchell & Co. have been the Auditors of the Company for more than five years.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS OF THE COMPANY

On January 28, 1976, the Company entered into an agreement with Canadian Imperial Bank of Commerce and The Royal Bank of Canada, pursuant to which the Company sold and each bank purchased $25,000,000 aggregate principal amount of 7¼% Income Debentures at and for a total purchase price of $25,000,000. J. W. Kerr and R. E. Harrison, directors of the Company, are directors and shareholders of Canadian Imperial Bank of Commerce and J. H. Coleman, Herbert C. Pinder and Ian D. Sinclair, directors of the Company, are directors and shareholders of The Royal Bank of Canada.

In the ordinary course of its business the Company purchases natural gas at competitive prices from many producers in western Canada, including CanDel Oil Ltd., and PanCanadian Petroleum Limited. Smiley Raborn, Jr., a director of the Company, is an officer, director and shareholder of CanDel Oil Ltd. Robert W. Campbell, Ian D. Sinclair and John M. Taylor, directors of the Company, are officers, directors and shareholders of PanCanadian Petroleum Limited.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Company maintains directors' and officers' liability insurance with a policy limit of $10,000,000 per occurrence subject to a deductible of $10,000 per occurrence. Generally speaking, under this insurance, the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers and individual directors and officers are reimbursed for losses arising during the performance of their

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TransCanada PipeLines

NOTICE OF MEETING

The Annual Meeting of the common shareholders will be held in the Palliser Room, Palliser Hotel, Calgary, Alberta, on Wednesday, April 5, 1978, at 10:00 o'clock a.m., Calgary Time.

The Annual Meeting will:

(i) receive the 1977 Directors' Report, the 1977 Financial Statements and Auditors' Report;
(ii) appoint Auditors and elect Directors for 1978; and
(iii) deal with other business which arises and is properly before it.

Even if you plan to attend the meeting the enclosed proxy should be completed and returned to ensure your representation.

DATED at Toronto, Canada this 7th day of March, 1978.

By order of the Board,

D. M. JOHNSTON,
Corporate Secretary.

MANAGEMENT PROXY CIRCULAR

To Our Shareholders:

The proxy enclosed is solicited by the Management of the Company to be used in connection with the Annual Meeting of common shareholders to be held April 5, 1978.

The cost of preparing and mailing all proxy and related material will be borne by the Company. The persons named in the proxy are officers of the Company. While most proxies will be solicited by mail, some shareholders may also be approached personally or by telephone.

Your proxy will be voted on any ballot that may be called for in accordance with your instructions. **If no instructions are given concerning any matter, your proxy will be voted in favour of such motion.**

You may revoke a proxy by instrument in writing executed by you or your attorney authorized in writing (or, in the case of a corporation, under its corporate seal or by a duly authorized officer or attorney), and deposited either at the head office of the Company at any time up to and including the last business day preceding the day of the Annual Meeting, or any adjournment thereof, or with the Chairman of the Annual Meeting on the day of such Meeting or adjournment thereof.

RECORD DATES FOR VOTING AND FOR DEPOSIT OF PROXIES

The Board of Directors of the Company has fixed March 7, 1978, as the record date as of which common shareholders of the Company entitled to vote at the Annual Meeting will be determined. Each holder will be entitled to one vote in respect of the matters on which he or she is entitled to vote for each common share held.

VOTING SHARES

The number of outstanding common shares entitled to vote at the Annual Meeting as at March 7, 1978, is 39,618,704.

As at March 7, 1978, the only person or company to the knowledge of the directors or officers of the company who or which beneficially owns, directly or indirectly, or exercises control or direction over shares carrying more than 10% of the votes attached to all shares of the Company is Canadian Pacific Investments Limited, which beneficially owns directly or indirectly and exercises control or direction over 4,732,457 of the Company's outstanding common shares (representing 11.95% of all outstanding common shares),

ELECTION OF DIRECTORS

The Board of Directors consists of 16 directors. Unless otherwise directed, the persons named in the enclosed form of proxy intend to vote at the Annual Meeting for the election of the following nominees, all of whom, with the exception of Robert H. Jones, are now directors of the Company. Should any nominee for director become unable or unwilling to accept nomination for election, the persons designated in the enclosed form of proxy intend to vote for any other person recommended by the management of the Company. Management has no reason to believe that any of the nominees named below will be unable or unwilling to serve if elected. Each director elected will hold office until the next Annual Meeting or until his successor is duly elected.

The persons proposed to be nominated for election as directors, all other major positions and offices with the Company now held by them, their principal occupations or employments, the year in which they became directors of the Company, and the approximate number of shares of each class of shares of the Company beneficially owned, directly or indirectly, by each of them or over which control or direction is exercised by each of them, as at March 7, 1978, are:

	Became Director	Common Shares (Note)
James M. Cameron, of Toronto, Ontario, is Executive Vice President of the Company.	Apr. 13, 1977	1,560
Robert W. Campbell, of Calgary, Alberta, is Chairman and Chief Executive Officer of PanCanadian Petroleum Limited, Calgary. (Oil and Gas Production)	June 8, 1961	103
John H. C. Clarry, Q.C., of Toronto, Ontario, is a Partner of Messrs. McCarthy & McCarthy, Barristers and Solicitors, Toronto.	Apr. 14, 1976	1,100
John H. Coleman, of Toronto, Ontario, is President of J.H.C. Associates Limited, Toronto. (Consultants)	Mar. 4, 1970	300
A. Jean de Grandpré, Q.C., of Montreal, Quebec, is Chairman and Chief Executive Officer of Bell Canada, Montreal. (Telecommunications Company)	Mar. 7, 1973	600
Russell E. Harrison, of Toronto, Ontario, is Chairman and Chief Executive Officer of Canadian Imperial Bank of Commerce, Toronto. (Canadian Chartered Bank)	Apr. 14, 1976	400
Robert H. Jones of Winnipeg, Manitoba, has been President and Chief Executive Officer of The Investors Group, Winnipeg since 1971. (Financial Services Holding Company)	—	—
James W. Kerr, of Toronto, Ontario, is Chairman and Chief Executive Officer of the Company.	Dec. 3, 1958	7,803
Gordon P. Osler, of Toronto, Ontario, is Vice Chairman of the Board of Directors and Chief Executive Officer of British Steel Corporation (Canada) Limited, Toronto and Chairman of the Board of Directors of Slater Steel Industries Limited, Hamilton. (Holding and Trading Company)	Apr. 30, 1954	750
Herbert C. Pinder, of Saskatoon, Saskatchewan, is Secretary-Treasurer and a director of The Saskatoon Drug & Stationery Company Limited, Saskatoon, and President of Saskatoon Trading Company Limited, Saskatoon. (Wholesale and Retail Distributor)	Apr. 13, 1971	300
Smiley Raborn, Jr., of Calgary, Alberta, is Chairman and Chief Executive Officer of CanDel Oil Ltd., Calgary. (A Natural Resource Company)	Jan. 26, 1961	12,030
Frank A. Schultz, of Dallas, Texas, is an independent oil operator.	Apr. 13, 1951	2,586
Ian D. Sinclair, Q.C., of Montreal, Quebec, is Chairman and Chief Executive Officer of Canadian Pacific Limited, Montreal. (A Transportation, Natural Resource and Manufacturing Company)	Oct. 11, 1966	300
John M. Taylor, of Calgary, Alberta, is President of PanCanadian Petroleum Limited, Calgary. (Oil and Gas Production)	Apr. 13, 1971	300
J. Ross Tolmie, Q.C., of Ottawa, Ontario, is the Senior Partner of Herridge, Tolmie, Barristers and Solicitors, Ottawa.	Apr. 13, 1951	35,460
George W. Woods, of Toronto, Ontario, is President of the Company.	Dec. 10, 1968	7,000

Note: The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by the respective nominee directors individually.

REMUNERATION OF DIRECTORS AND OFFICERS

During the fiscal year ended December 31, 1977, remuneration, as set forth in the table below, was paid by the Company to its directors and certain of its officers. Officers of the Company who are also directors do not receive directors' fees. Directors and officers of the Company do not receive remuneration from any subsidiary of the Company.

	Nature of Remuneration Earned		
	Directors' Fees	Salaries	Total
Remuneration of Directors who are not officers Number of Directors: 13	$134,000	—	$ 134,000
Remuneration of Officers who received in excess of $40,000 Number of Officers: 20	—	1,235,000	$1,235,000
Totals:	$134,000	1,235,000	$1,369,000

Note: There were no bonuses, non accountable expense allowances or other form of remuneration paid by the Company or its subsidiaries.

The estimated aggregate cost to the Company and its subsidiaries in the fiscal year ended December 31, 1977 of all pension benefits proposed to be paid under any pension or retirement plan in the event of retirement at normal retirement age, directly or indirectly, by the Company or any of its subsidiaries to directors and officers is $65,366.

The maximum annual aggregate of all remuneration payments other than the foregoing proposed to be paid in the future by the Company or any of its subsidiaries to directors and officers of the Company pursuant to any existing plans or arrangements is $50,000.

As at March 7, 1978, J. K. Archambault and H. N. Nichols, officers of the Company, are indebted to the Company on account of loans in connection with the purchase of their residences. The largest aggregate amount of such indebtedness since January 1, 1977 and the present balance and rate of interest of such indebtedness with respect to Mr. Archambault are $59,067.79, $57,895.95 and 7% respectively, and with respect to Mr. Nichols are $70,000, $69,588.29 and 6% respectively. During 1977, G. A. Leslie, an officer of the Company, was indebted to the Company on account of a short term loan required to facilitate the closing of the purchase of his residence. The largest aggregate amount of such indebtedness during 1977 was $64,055.25, and the entire sum was repaid prior to the end of the year.

INCENTIVE STOCK OPTION PLAN

At March 7, 1978, 266,056 common shares of the Company were reserved for the exercise of options granted or to be granted under the Company's Incentive Stock Option Plan to purchase common shares at a price per share equal to the average of closing bid prices of the common shares on the Vancouver, Alberta, Winnipeg, Toronto and Montreal Stock Exchanges on the day of grant. Since January 1, 1977, stock options have been granted as at March 7, 1978 to directors and officers of the Company as a group pursuant to such Plan as set out below:

Number of Common Shares Optioned	Date of Grant of Option	Date of Expiry of Option	Purchase Price per Share	Price Range of Common Shares on Toronto Stock Exchange in the thirty-day period preceding date of grant	
				Low	High
52,500	Apr. 13, 1977	Apr. 13, 1987	14.063	13.75	14.25

From January 1, 1977 to March 7, 1978, directors and officers of the Company purchased common shares of the Company pursuant to stock options granted to them under the Plan as set out below:

Number of Common Shares Purchased	Quarterly Period	Purchase Price Range per share per Quarter		Price Range of Common Shares on Toronto Stock Exchange in thirty-day period preceding dates of purchase	
		Low	High	Low	High
56,650	Jan. 1-Mar. 31, 1977	8.729	11.875	12.125	14.25
18,122	April 1-June 30, 1977	8.729	12.375	13.375	15.625
11,100	July 1-Sept. 30, 1977	8.729	12.375	14.875	16.625
4,800	Jan. 1-Mar. 7, 1978	8.729	13.510	14.625	15.25

APPOINTMENT OF AUDITORS

The persons designated in the enclosed form of proxy intend to vote at the Annual Meeting for the appointment of Messrs. Peat, Marwick, Mitchell & Co., Chartered Accountants, Toronto, Ontario, as Auditors of the Company, to hold office until the Annual Meeting to be held in 1979 and to authorize the Board of Directors to fix the remuneration of such Auditors. Messrs. Peat, Marwick, Mitchell & Co. have been the Auditors of the Company for more than five years.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS OF THE COMPANY

Mr. A. Deane Nesbitt, a director of the Company until his death on February 22, 1978 was an officer, director and shareholder of Nesbitt Thomson Securities Limited. Under an underwriting agreement dated September 7, 1977 between the Company and Nesbitt Thomson Securities Limited, Wood Gundy Limited, McLeod Young Weir Limited, and Midland Doherty Limited as underwriters, the Company sold and the underwriters purchased, on September 27, 1977, $75,000,000 principal amount of 9.60% Sinking Fund Debentures, Series G at a price of $98.25 per $100 principal amount thereof.

In the ordinary course of its business the Company purchases natural gas at competitive prices from many producers in western Canada, including CanDel Oil Ltd., and PanCanadian Petroleum Limited. Smiley Raborn, Jr., a director of the Company, is an officer, director and shareholder of CanDel Oil Ltd. Robert W. Campbell, Ian D. Sinclair and John M. Taylor, directors of the Company, are officers, directors and shareholders of PanCanadian Petroleum Limited.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Company maintains directors' and officers' liability insurance with a policy limit of $10,000,000 per occurrence subject to a deductible of $10,000 per occurrence. Generally speaking, under this insurance the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers and individual directors and officers are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Excluded from coverage are illegal acts and those acts which result in personal profit. For the year ended December 31, 1977, the total annual premium in respect of such insurance was $26,752; of such premium $9,987 and $13,827 in respect of directors as a group and officers as a group was paid by the Company while $1,196 and $1,742 was paid by the directors and officers.

OTHER BUSINESS

The enclosed form of proxy gives discretionary authority to the persons named to vote on other matters coming before the Annual Meeting. At the present time the management of the Company knows of no other matters. If any such matters come before the Annual Meeting, the persons named in the proxy will vote in accordance with their judgment on such matters.

DIRECTORS' APPROVAL

The contents of this Management Proxy Circular and its sending have been approved by the directors of the Company.

D. M. Johnston
Corporate Secretary

Toronto, Canada
March 7, 1978

Printed in Cana

TransCanada PipeLines

Proceedings at the
Annual Meeting of Shareholders

Wednesday, April 5, 1978
Calgary, Alberta

Annual Meeting of Shareholders of TransCanada PipeLines

Palliser Hotel, Calgary, Alberta
Wednesday, April 5, 1978, 10:00 a.m.

Highlights

James W. Kerr, Chairman and Chief Executive Officer, addressed the meeting and his remarks are included in this booklet.

Directors elected for the ensuing year were:

James M. Cameron	Gordon P. Osler
Robert W. Campbell	Herbert C. Pinder
John H. C. Clarry, Q.C.	Smiley Raborn, Jr.
John H. Coleman	Frank A. Schultz
A. Jean de Grandpré	Ian D. Sinclair, Q.C.
Russell E. Harrison	John M. Taylor
Robert H. Jones	J. Ross Tolmie, Q.C
James W. Kerr	George W. Woods

Peat, Marwick, Mitchell & Co. were appointed auditors for the current year.

Officers of the Company for the ensuing year appointed by the Board of Directors following the Annual Meeting were:

James W. Kerr, Chairman and Chief Executive Officer
George W. Woods, President
James M. Cameron, Executive Vice-President
Walter Hindle, Group Vice-President and Executive Engineer

John K. Archambault, Vice-President and General Counsel
Gordon A. Leslie, Vice-President, Customer Relations and Planning
C. Kennedy Orr, Vice-President, Alberta Affairs
Richard D. Walker, Vice-President, Gas Transmission
John G. C. Weir, Vice-President, Corporate Services

George C. Britton, Vice-President, Engineering and Operations – Pipeline
Bruce M. Escoffery, Vice-President, Rates
George M. Hugh, Vice-President, Engineering and Operations – Compression
G. Frederick Hulme, Vice-President, Gas Supply
H. Neil Nichols, Vice-President and Treasurer
Raymond F. Sim, Vice-President, Personnel and Taxation
Kenneth G. Whiteside, Vice-President and Controller

Donald M. Johnston, Corporate Secretary
Martin Berman, Assistant Secretary
E. W. Howard Mallabone, Assistant Secretary

Remarks by James W. Kerr Chairman and Chief Executive Officer

Ladies and Gentlemen:

It is again a genuine pleasure to welcome you to an Annual Meeting of our Shareholders in Calgary. Your company is in its twentieth year of operation, and it is particularly appropriate that we are meeting in Alberta — the source of the natural gas that has made possible our significant corporate growth and development since 1958. It has been our custom to hold this Annual Meeting in Alberta every third year and your attendance at this meeting indicates your continued interest in the company, and is sincerely appreciated.

The Annual Report which was mailed to you about three weeks ago, and which you have in front of you this morning, confirms that 1977, the year under review at this meeting, was by far the best year in our corporate history.

Revenues and Income

Net income reached a new high at $86,183,000, resulting in a new high for earnings per common share at $2.01. The 1977 earnings per share increased from $1.92 the previous year after an 8% increase in the number of outstanding common shares.

The total operating revenue for 1977 also reached a record level of almost $1.9 billion (figure 1). Primarily as a result of the recent dramatic price

Figure 1

OPERATING RESULTS

	1977	1976
Operating revenues	$1,870,325,000	$1,499,137,000
Net income	$86,183,000	$79,635,000
Net income per common share	$2.01	$1.92
Dividends per common share	97¢	85¾¢

increases for natural gas, the revenue last year was over twice the 1975 level and three times the 1974 revenue which we reviewed on the occasion of our last Annual Meeting in Calgary.

It is too soon after the first quarter of 1978 to have any firm financial operating results. However, the approximate volume of gas sold and transported during the past three months is 323 billion cubic feet, up very slightly from the first quarter 1977.

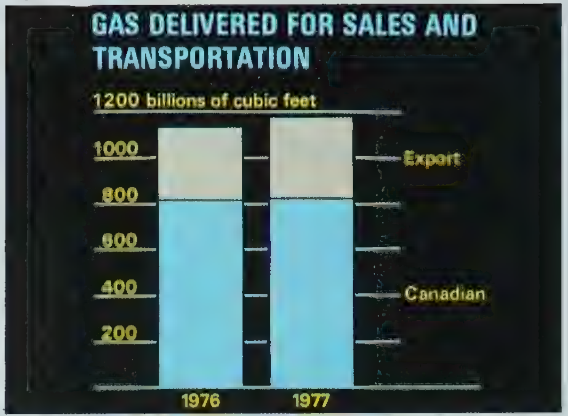
As a result of the significant increase in net income during the past three years, the dividend declared on common shares last year was 97¢, twice the dividend paid three years ago. The dividend was again increased late last year to an annual rate of $1.03, the maximum permitted by the Anti-Inflation Board. Your Directors are still very concerned about the percentage of net income paid out in dividends and hope that another increase can be authorized later this year.

Gas Sales and Transportation

Although the dollars of revenue have dramatically increased during the past year, the actual volume of gas sold and transported increased only marginally, to 1170 billion cubic feet. This is only 1½% above the 1976 level but still represents a tremendous volume of energy that has been moved to Canadian markets east of Alberta, and in the United States, by your company's gas transmission system. To put this volume of energy in perspective, the 1977 volume was equivalent to 195 million barrels of oil, or 47 million tons of coal, and had a heating value sufficient to heat and provide hot water for over seven million Canadian homes for one year.

This bar chart (figure 2) shows the modest increase of total sales and transportation volumes, 1977 over 1976, and in the grey bars also demonstrates the growth of export sales in 1977. This export growth resulted from the delivery of 32 billion cubic feet of gas to eastern United States markets during the very cold weather early last year. With the co-operation of the Ontario gas distribution companies, TransCanada was able to provide very important assistance to the residential, commercial

Figure 2



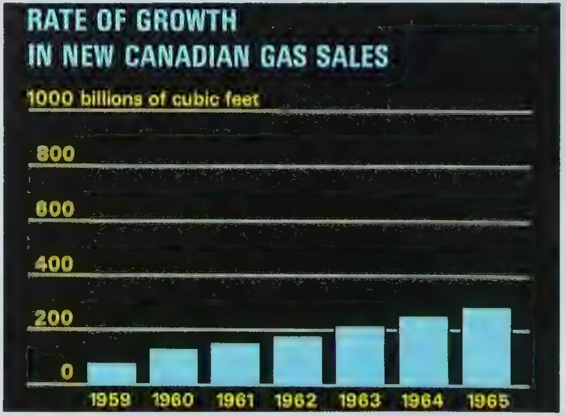
and industrial markets in eastern United States during the emergency that was created by the unusually cold weather last winter.

Because of the importance of *Canadian* gas sales to your company, and certainly to a great many organizations and people in Alberta, a quick 20-year review might be of interest.

Gas Sales 1959-1965

Back in 1959, the first full year of operation of the TransCanada system, the sales were 74 billion cubic feet, less than 10% of last year's Canadian sales. From this bar chart (figure 3) you can see they more than doubled by 1965.

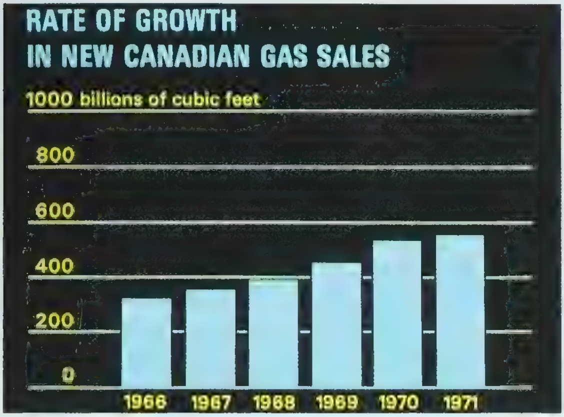
Figure 3



Gas Sales 1966-1971

For the next six years through 1971, Canadian sales doubled to 550 billion cubic feet (figure 4).

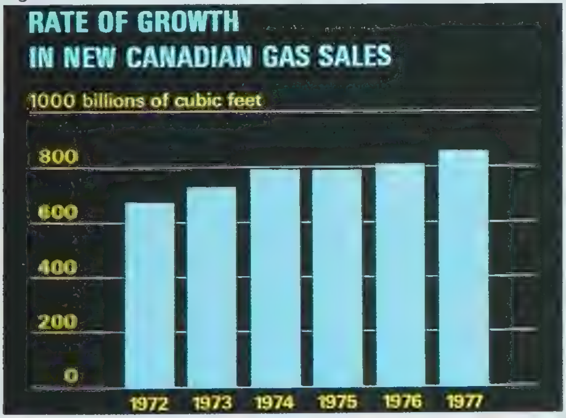
Figure 4



Gas Sales 1972-1977

As shown on this chart (figure 5), since 1974 the annual increase in Canadian sales has not been as great but still the total volume has increased to 820 billion, over twice the volume of less than ten years ago. The smaller growth during the past four years reflects the effect of conservation and particularly the increased competition from other fuels. Your company faces this competition because natural gas prices have risen faster than prices of competitive fuels – and competition from other fuels is keen in spite of the fact that the natural gas industry can now offer the market the assurance of a long term supply.

Figure 5



One of the most difficult management challenges that we have faced year after year for the past twenty years has been the establishment of a proper equilibrium between availability of gas supply, pipeline capacity, and market demand. Just after the early 1960's, we had a series of problems and setbacks in our effort to acquire adequate reserves of natural gas to support sales to the United States export market. In the late 1960's and certainly in the early 1970's we were forced to concentrate on providing enough pipeline capacity to move the available gas to available markets.

Three years ago, on the occasion of our last Annual Meeting in Calgary, activity in the producing sector of the industry was nearly at a standstill due to uncertainties caused by a number of governmental differences. Our principal concern in gas supply at that time was to obtain sufficient supplies to permit us to serve our markets that were then under contract. At that time – just three years ago – in order to fulfil approved Canadian requirements, government personnel were even talking about the necessity of curtailment of sales of natural gas to U.S. markets. Two years ago we started to experience an excess of gas supply over the requirements of the market, and this year our purchase obligations will far exceed our requirements.

Although the Alberta producers are just one part of the corporate team consisting of those companies in the producing sector of the industry, the gathering system, the transmission system, the distribution system, and the equipment manufacturers, I do want to record at this meeting that through all our "ups and downs" in supply, in pipeline capacity and in markets during the past twenty years, we have appreciated the support of

the Alberta producers. Going back twenty years, we certainly had their co-operation in providing the initial "10¢ contracts" that made possible the construction of our initial pipeline system. Over the years we have always been able to acquire enough gas to meet our market requirements. Often price negotiations were difficult, but we must remember that until 1970, Alberta gas was having considerable difficulty competing in eastern Canadian markets with gas available from the United States – and certainly it was difficult for Alberta gas to compete with imported oil. And again in this year, 1978, we are in a position where Alberta gas is having difficulty competing in eastern industrial markets because of competition from lower priced alternative fuels.

The higher field prices paid during the last few years have created a record level of exploration and development of new gas. These higher prices have also encouraged producers to make investments to substantially improve deliverability from older gas fields.

It is an interesting fact that during a 15-month period from June 1976 to September 1977, the number of producing wells in TransCanada's gas supply area increased 50% from approximately 8,000 wells to over 12,000 wells, and many of these wells were in the older fields.

The reversal of the production decline, the coming on stream of gas contracted in 1975 and 1976 in anticipation of production declines, and the failure of markets to grow as projected, have resulted in a situation where TransCanada's gas purchase obligation is now significantly in excess of market requirements. While this situation will prevail for only a short period of time, we are conscious of the cash flow and operating problems that will be created for many of our producers. We are examining alternatives to ensure that all of our producers are equitably treated, and that the adverse impact is minimized.

The complexity of this problem is demonstrated by the fact that we are purchasing gas under 2,500 contracts from over 700 companies. Resolution of the treatment of the carrying charges of take-or-pay payments made to producers is an essential ingredient to the solution of the problem.

The dollar volume of our gas purchases in Alberta is not generally known or recognized. Again referring back to the last time we met, in April 1975, we were purchasing gas from Alberta producers at the rate of $1,000 a minute. Today we are purchasing gas from Alberta producers at the rate of $4,200 per minute. Actually, earlier this year during a period of extremely cold weather we were running at the rate of $4,700 per minute.

This dramatic change in the dollar volume of our gas purchases is of course due primarily to the significantly higher prices that are being paid for gas at the wellhead. In April 1975 we were paying an average of 44¢ per Mcf compared with $1.53 today. It is rather interesting that since our initial purchase in 1958, your company has paid more than $5.1 billion to producers for the 12½ trillion cubic feet we have purchased up to the present time.

As indicated earlier in my remarks and on this slide (figure 6), our total 1977 sales increased 4%, or 42 billion cubic feet over the previous year, from 1127 to 1170 billion cubic feet. Canadian sales increased only 1½% or 11 billion cubic feet, from 808 to 819 billion cubic feet. While it is difficult to trace all sales lost to other forms of energy, we estimate that about 27 billion cubic feet were lost for various reasons. One reason is the inability of some sectors of

Figure 6

GAS DELIVERED FOR SALES AND TRANSPORTATION

Annual volume in billions of cubic feet	1976	1977
Canadian	808	819
U.S. Export	264	291
Transportation for others	55	60
Total	1127	1170

industry to pay the current price for natural gas. Another reason is that on a BTU basis, lignite coal is priced considerably lower than gas, and that imported coal is also priced considerably lower than gas. Also price competition from residual oil is serious competition for the gas industry in industrial markets in eastern Canada.

Fortunately it is now becoming recognized by our governments that residual oil is in over supply, and until it is either upgraded or exported from Canada, its selling price will undoubtedly be dropped to whatever level is necessary to sell it. Accordingly, significant increases in Canadian domestic gas sales cannot be expected until the Government implements its policy of self-reliance and moves to displace foreign oil with natural gas. Residual oil competition in eastern Canada is the most significant reason that natural gas sales are levelling off.

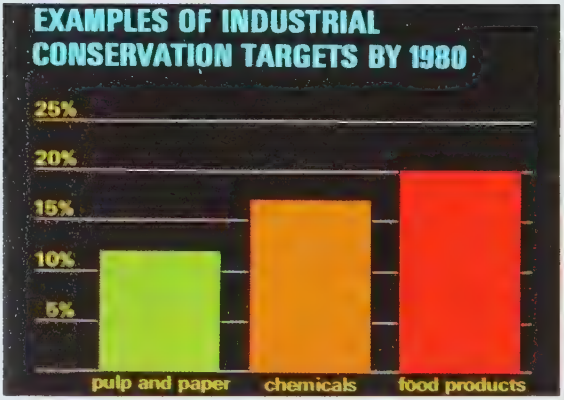
During the past year it has become increasingly evident that energy conservation programs in all sectors of our market are becoming quite effective. In our industrial market there have been major efforts to conserve energy, and specifically with respect to natural gas, its increased selling price has made it possible for substantial capital expenditures to be justified by various industrial users.

Conservation

For example, the pulp and paper industry as shown in green on this slide (figure 7) is currently working on a conservation program to reduce their total energy consumption by 12%. The chemical industry shown in orange has a target of 17% reduction, and the food products industry in red has a target of 20%. Some specific examples in our industrial and commercial markets are interesting. The Polysar organization in Sarnia has during the past year achieved a 15% reduction in energy consumption. General Motors in Oshawa has recently announced a 6% reduction due solely to conservation, and Carleton University in Ottawa has achieved over 25%.

Since we use very large volumes of natural gas in our compressor stations from the

Figure 7



Alberta-Saskatchewan border to Vermont, we have been just as energy conservation conscious as any of our customers. It is very gratifying to be able to report that through improved operating methods, new techniques for using existing equipment, and with some new gas-fired equipment, we saved 7½ billion cubic feet in 1975, 11 billion cubic feet in 1976, and 12 billion cubic feet last year. To put this in perspective, this three-year saving is enough to handle the entire residential, commercial and industrial requirements of a typical Canadian city of 55,000 people for a three-year period.

While price competition from other fuels and conservation have tended to depress our available market, the natural gas distribution companies which TransCanada serves are concentrating their sales efforts very heavily on new residential, commercial, and on high priority industrial sales. It will, however, take some time to regain the marketing momentum of the early 1970's in our present markets, and the rate of progress will be to a great extent governed by the rate at which both the American and Canadian economies recover.

Your company is actively trying to expand its market potential. The key factor in the use of natural gas in the areas of eastern Canada, which are either totally or partially dependent on foreign oil, is tied to the implementation of Canada's policy of self-reliance. A growing concern of Canadians from

all parts of the country is to obtain reliable sources of energy to meet the needs of our country. This concern comes into sharp focus as we see the significant increases in our balance of payment deficit caused by the large volumes of imported oil. The concern becomes even more serious as we approach the time when the world supply of oil will not be sufficient to meet the global demand.

In addition to fuel conservation which has been mentioned earlier, there are a number of solutions available to promote the attainment of self-reliance.

An increase in the supply of western Canadian crude oil to Montreal refiners would automatically and proportionately displace crude oil imports from off shore. The sale of additional Canadian natural gas in substitution of products derived from foreign oil would achieve a similar result. It is our view that both actions should be vigorously pursued.

As part of TransCanada's contribution to the solution of this national problem, during the past two to three years we have been examining the potential market for natural gas east of the present Montreal terminus of our pipeline system. In-depth field studies were carried out last year and we have concluded that we should attempt to gain access to that market by an eastward expansion of our pipeline system.

Eastward Expansion

We are very pleased to be able to announce that yesterday, April 4, we filed with the National Energy

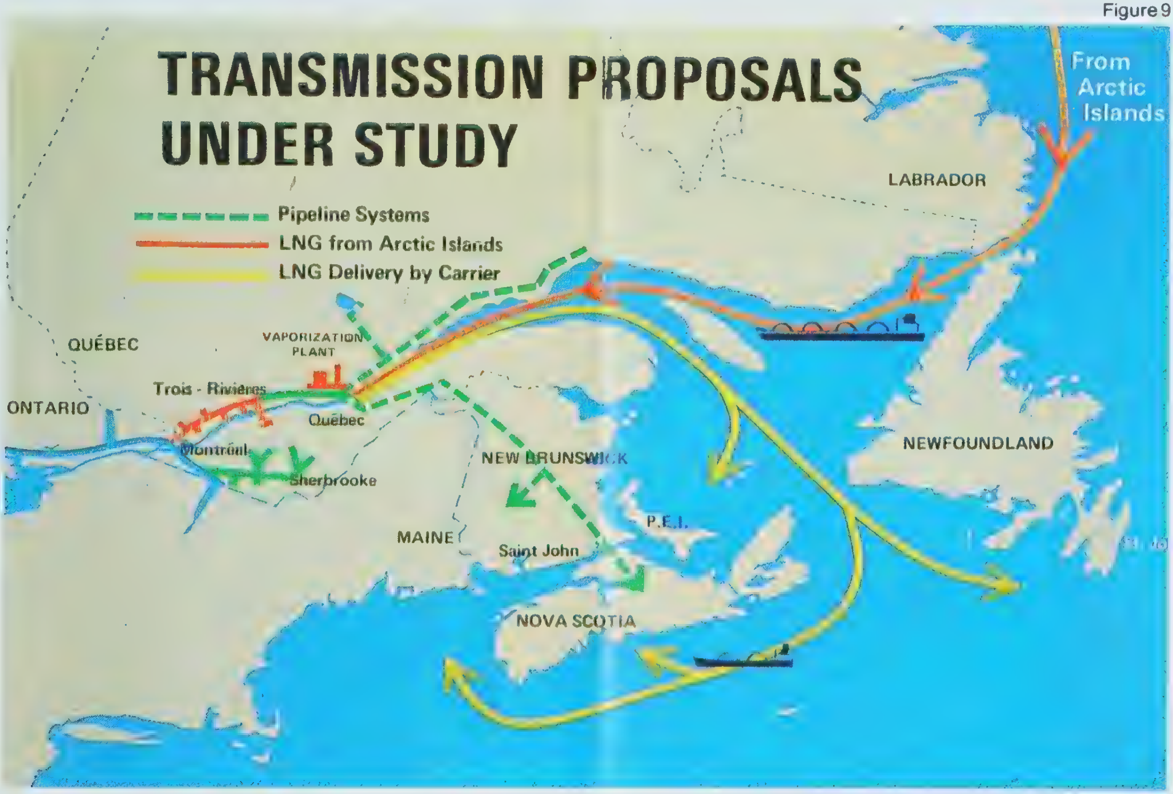
Figure 8

Board an application to expand our natural gas transmission eastward from Montreal to Trois Rivières and Bécancour, an industrial centre about 80 miles down the St. Lawrence River. This extension of the TransCanada system is shown by the red line on this map (figure 8). The application states that further developments are being studied and may form the basis of future applications. These future developments, as shown by the green lines on this map, will almost certainly include a further extension of the pipeline east to Quebec City and south to many major centres in the eastern townships, including St. Hyacinthe, Drummondville, Granby and Sherbrooke, and also north of the St. Lawrence River to industrial areas including Shawinigan, La Tuque and Donnacona.

Transmission Proposals Under Study

The application states that your company is also studying the construction of liquid natural gas – LNG – receiving terminal and vaporization facilities near Quebec City, with connections to the TransCanada pipeline system. During the past 2½ years your company has pioneered a study of the use of LNG ice breaker carriers to move gas from Arctic islands which may not be readily connected to a major Arctic pipeline. Part of the route is shown by the orange line on this map (figure 9). These studies are very encouraging and this LNG icebreaker carrier proposal may ultimately be the key to expanded natural gas service in Quebec and the Maritime provinces.

Figure 9



Subsequent developments, as shown in yellow on this map, could consist either of an LNG carrier transportation system, or a pipeline system, as shown in hatched green lines, to serve the remaining markets of eastern Canada. This could involve the construction of LNG vaporization facilities at various centres throughout the Maritimes such as Saint John, New Brunswick, Canso and Sydney in Nova Scotia, Summerside, Prince Edward Island, and St. John's, Newfoundland.

Polar Gas Project

TransCanada is continuing to actively manage and encourage the Polar Gas Project (figure 10) which,

Figure10

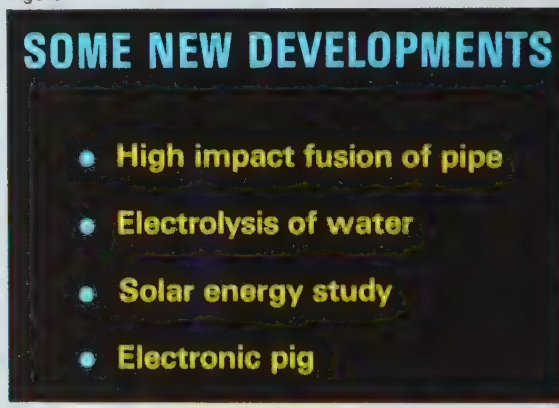
as you know, is designed to move Arctic Islands gas by pipeline to eastern Canadian and U.S. markets. The Polar Gas group filed the first part of their application with the National Energy Board in December, 1977. Their environmental data was just recently filed and it is hoped that the National Energy Board will be able to commence this important hearing without undue delay.

In connection with our future involvement in Northern Frontier projects, in August of last year your Company agreed in principle to take a 20% equity position in the Foothills (Yukon) Project. Discussions will be resumed in the near future to determine TransCanada's position in respect to the parent company, the proposed Dempster pipeline and the proposed pipeline from Empress, Alberta to Monchy, Saskatchewan on the U.S. border.

New Developments

While our corporate planning for future pipeline expansion (figure 11) has been actively under way during the past several months, in addition our

Figure 11



efforts have been directed toward research and development which is designed to reduce construction costs and improve efficiency and safety of natural gas pipeline operations. As an example of this activity, we are making considerable progress in the development of a high impact welding process for large diameter pipe which, if successful, will enable all-weather construction at a considerably lower cost than we have experienced in the past.

As announced a year ago, your company is still actively involved in research involving the electrolysis of water to generate hydrogen and heavy water using surplus hydroelectric energy. We

are also involved in a solar energy utilization study in Ontario. Our electronic pig program has significantly moved ahead during the past few months and is now recognized as an extremely important device for examination of existing pipelines and for testing of newly constructed gas and oil pipelines.

Deane Nesbitt

It is with sincere regret and a deep sense of loss that I must comment on the passing of Deane Nesbitt last February. Deane had a very unfortunate skiing accident which proved to be fatal. He had been on our Board of Directors since 1954 – four years before our company commenced operations. During the 24 years that he served, no other Director made a greater contribution to the success, welfare and prosperity of your company. None of us on the Board of Directors or in management will ever forget Deane, his sound judgement and business acumen. To commemorate the contribution that Deane made to TransCanada, we are in the process of establishing an appropriate memorial at the Montreal General Hospital.

Robert Jones

We are fortunate to be able to have Robert H. Jones of Winnipeg join our Board of Directors. Mr. Jones is President and Chief Executive Officer of The Investors Group in Winnipeg, and his financial and business experience will be an important asset to our deliberations. We are particularly pleased that we will now have a representative from Manitoba on our Board.

Conclusion

There are many reasons why all of us involved in TransCanada should be optimistic about future prospects. The skills and strengths of our employees, and the continuation of dedicated effort and reliable judgment that they have exhibited in the past are extremely important ingredients in the ability of your company to handle the challenges that lie ahead. The profitable development of TransCanada during the past twenty years is the result of the enthusiasm and expertise of its men and women, and we sincerely believe that this important asset will continue to provide prosperous growth in future years.



TransCanada PipeLines

PRINTED IN CANADA

REMARKS

by

JAMES W. KERR
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
TRANSCANADA PIPELINES

at the
ANNUAL MEETING OF SHAREHOLDERS
PALLISER HOTEL
CALGARY, ALBERTA

April 5, 1978

OPERATING RESULTS

	1977	1976
Operating revenues	$1,870,325,000	$1,499,137,000
Net income	$86,183,000	$79,635,000
Net income per common share	$2.01	$1.92
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SLIDE NO. 1
Revenues and Income

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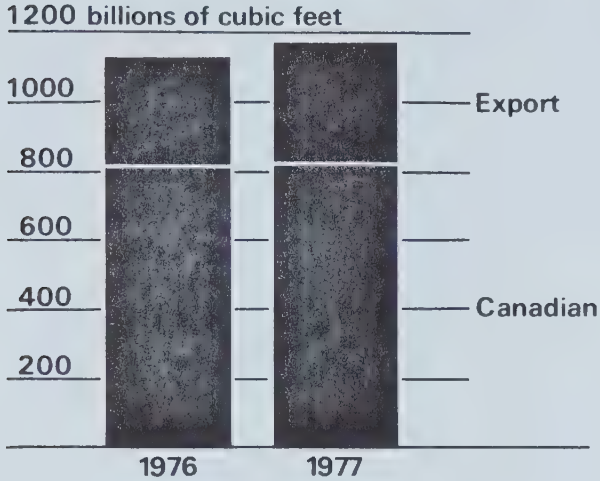
GAS DELIVERED FOR SALES AND TRANSPORTATION



SLIDE NO. 2
Gas Sales and Transportation

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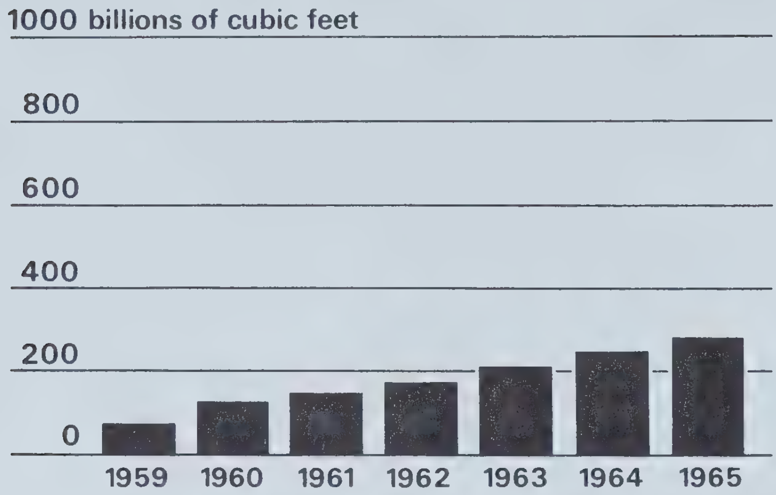

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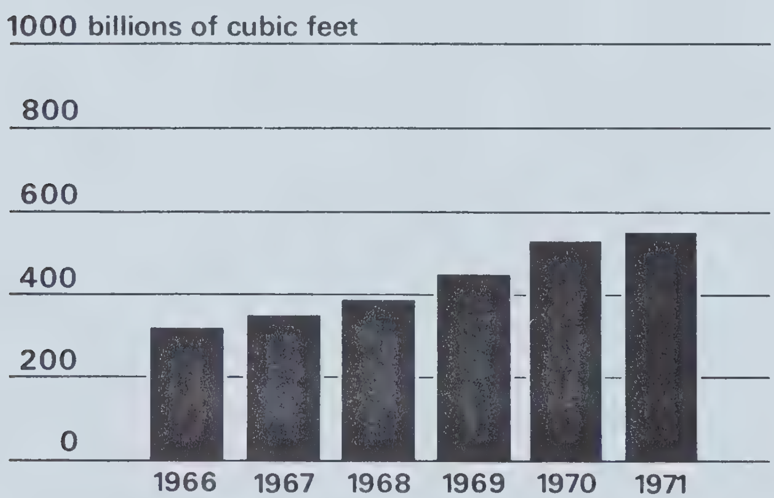

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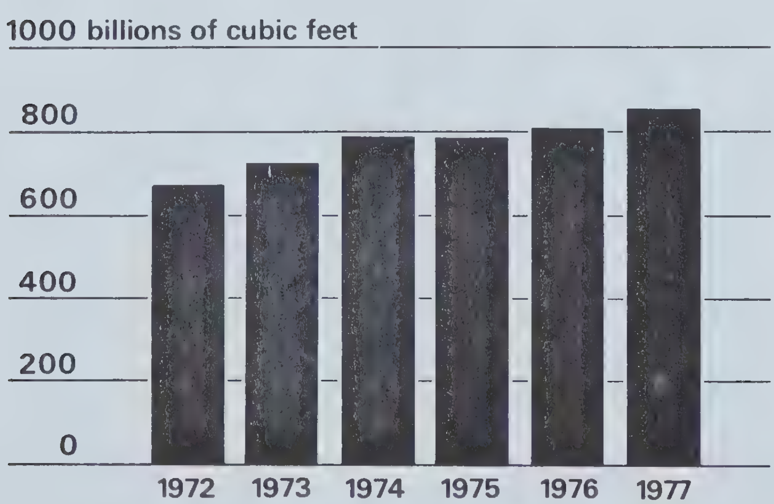

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SLIDE NO. 3
Gas Sales 1959 - 1965

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SLIDE NO. 4
Gas Sales 1966 - 1971

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SLIDE NO. 5
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Gas Sales and Transportation

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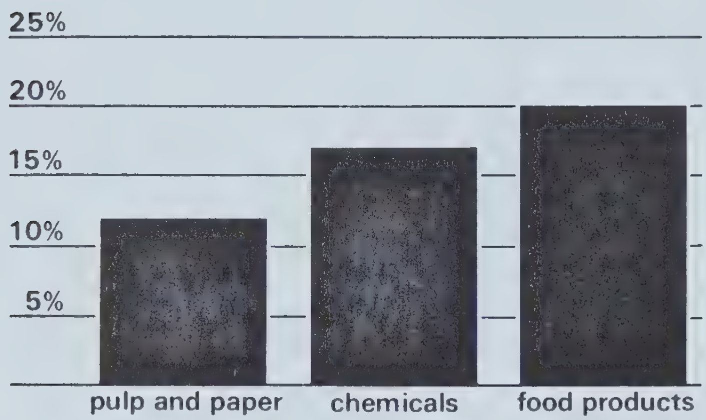
EXAMPLES OF INDUSTRIAL CONSERVATION TARGETS BY 1980



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SLIDE NO. 7
Conservation

For example, the pulp and paper industry as shown on this slide is currently working on a conservation program to reduce their total energy consumption by 12%. The chemical industry has a target of 17% reduction, and the food products industry has a target of 20%. Some specific examples in our industrial and commercial markets are interesting. The Polysar organization in Sarnia has during the past year achieved a 15% reduction in energy consumption. General Motors in Oshawa has recently announced a 6% reduction due solely to conservation, and Carleton University in Ottawa has achieved over 25%.

Since we use very large volumes of natural gas in our compressor stations from the Alberta-Saskatchewan border to Vermont, we have been just as energy conservation conscious as any of our customers. It is very gratifying to be able to report that through improved operating methods, new techniques for using existing equipment, and with some new gas-fired equipment, we saved 7-1/2 billion cubic feet in 1975, 11 billion cubic feet

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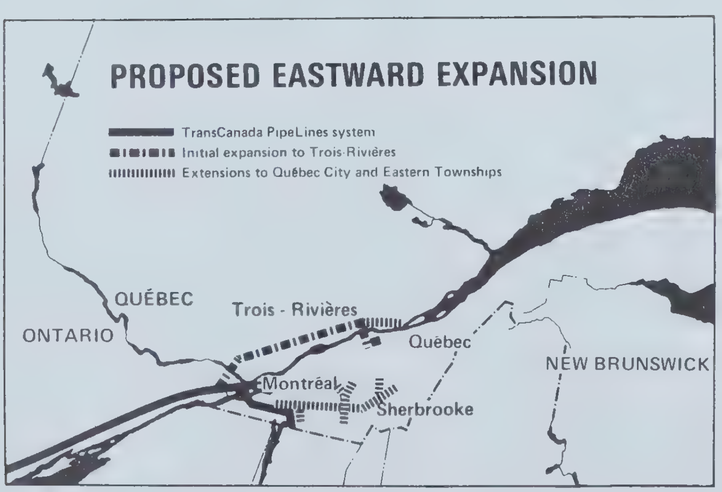
in 1976, and 12 billion cubic feet last year. To put this in perspective, this three-year saving is enough to handle the entire residential, commercial and industrial requirements of a typical Canadian city of 55,000 people for a three-year period.

While price competition from other fuels and conservation have tended to depress our available market, the natural gas distribution companies which TransCanada serves are concentrating their sales efforts very heavily on new residential, commercial, and on high priority industrial sales. It will, however, take some time to regain the marketing momentum of the early 1970's in our present markets, and the rate of progress will be to a great extent governed by the rate at which both the American and Canadian economies recover.

Your company is actively trying to expand its market potential. The key factor in the use of natural gas in the areas of eastern Canada, which are either totally or partially dependent on foreign oil, is tied to the implementation of Canada's policy for self-reliance. A growing concern of Canadians from all parts of the country is to obtain reliable sources of energy to meet the needs of our country. This concern comes into sharp focus as we see the significant increases in our balance of payment deficit caused by the large volumes of imported oil. The concern becomes even more serious as we approach the time when


PROPOSED EASTWARD EXPANSION
TransCanada PipeLines system
Initial expansion to Trois-Rivières
Extensions to Québec City and Eastern Townships
QUÉBEC
ONTARIO
Trois - Rivières
Québec
NEW BRUNSWICK
Montréal
Sherbrooke

the world supply of oil will not be sufficient to meet the global demand.

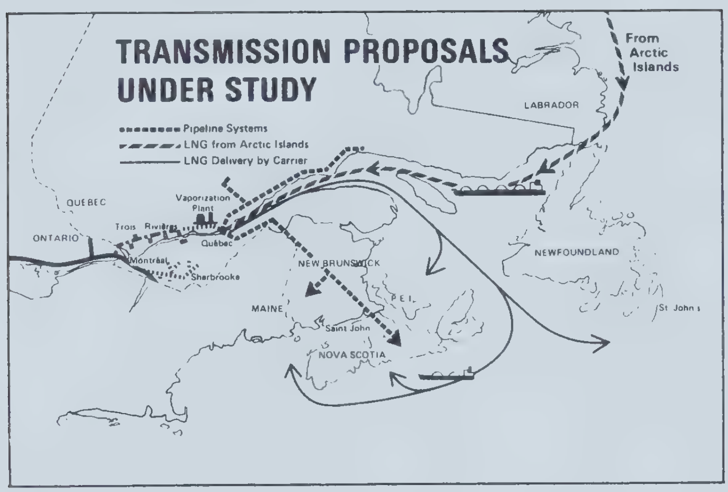
In addition to fuel conservation which has been mentioned earlier, there are a number of solutions available to promote the attainment of self-reliance.

An increase in the supply of western Canadian crude oil to Montreal refiners would automatically and proportionately displace crude oil imports from off shore. The sale of additional Canadian natural gas in substitution of products derived from foreign oil would achieve a similar result. It is our view that both actions should be vigorously pursued.

As part of TransCanada's contribution to the solution of this national problem, during the past two to three years we have been examining the potential market for natural gas east of the present Montreal terminus of our pipeline system. In-depth field studies were carried out last year and we have concluded that we should attempt to gain access to that market by an eastward expansion of our pipeline system.

SLIDE NO. 8
Eastward Expansion

We are very pleased to be able to announce that yesterday, April 4, we filed with the National Energy Board an application to expand our natural gas transmission eastward from Montreal to Trois Rivières and Bécancour, an industrial centre about 80 miles down the St. Lawrence River. This extension of the TransCanada system is shown on this map. The application states that further developments are being studied and may form the basis of future


TRANSMISSION PROPOSALS
UNDER STUDY
Pipeline Systems
LNG from Arctic Islands
LNG Delivery by Carrier
From
Arctic
Islands
LABRADOR
QUEBEC
Vaporization
Plant
Trois Rivières
ONTARIO
Québec
Montréal
Sherbrooke
NEW BRUNSWICK
MAINE
P.E.I.
Saint John
NOVA SCOTIA
NEWFOUNDLAND
St John's

applications. These future developments, as shown, will almost certainly include a further extension of the pipeline east to Quebec City and south to many major centres in the eastern townships, including St. Hyacinthe, Drummondville, Granby and Sherbrooke, and also north of the St. Lawrence River to industrial areas including Shawinigan, La Tuque and Donnacona.

SLIDE NO. 9
Transmission Proposals under Study

The application states that your company is also studying the construction of liquid natural gas - LNG - receiving terminal and vaporization facilities near Quebec City, with connections to the TransCanada pipeline system. During the past 2-1/2 years your company has pioneered a study of the use of LNG icebreaker carriers to move gas from Arctic islands which may not be readily connected to a major Arctic pipeline. Part of the route is shown on this map. These studies are very encouraging and this LNG icebreaker carrier proposal may ultimately be the key to expanded natural gas service in Quebec and the Maritime provinces.

Subsequent developments, as shown on the map, could consist either of an LNG carrier transportation system, or a pipeline system, to serve the remaining markets in eastern Canada. This could involve the construction of LNG vaporization facilities at various centres throughout

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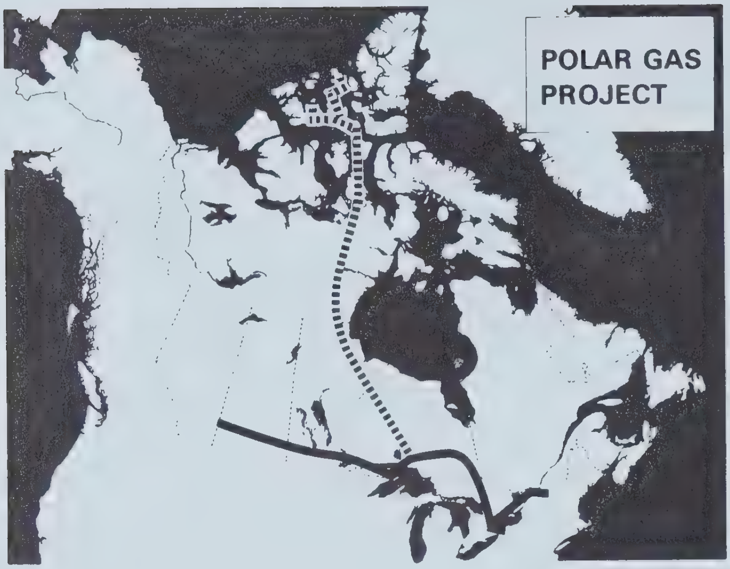
POLAR GAS
PROJECT

the Maritimes such as Saint John, New Brunswick, Canso and Sydney in Nova Scotia, Summerside, Prince Edward Island, and St. John's, Newfoundland.

SLIDE NO. 10
Polar Gas Project

TransCanada is continuing to actively manage and encourage the Polar Gas Project which, as you know, is designed to move Arctic Islands gas by pipeline to eastern Canadian and U.S. markets. The Polar Gas group filed the first part of their application with the National Energy Board in December, 1977. Their environmental data was just recently filed and it is hoped that the National Energy Board will be able to commence this important hearing without undue delay.

In connection with our future involvement in Northern Frontier projects, in August of last year your Company agreed in principle to take a 20% equity position in the Foothills (Yukon) Project. Discussions will be resumed in the near future to determine TransCanada's position in respect to the parent company, the proposed Dempster pipeline and the proposed pipeline from Empress, Alberta to Monchy, Saskatchewan on the U.S. border.

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SOME NEW DEVELOPMENTS

- High impact fusion of pipe
- Electrolysis of water
- Solar energy study
- Electronic pig

SLIDE NO. 11
New Developments

While our corporate planning for future pipeline expansion has been actively under way during the past several months, in addition our efforts have been directed toward research and development which is designed to reduce construction costs and improve efficiency and safety of natural gas pipeline operations. As an example of this activity, we are making considerable progress in the development of a high impact welding process for large diameter pipe which, if successful, will enable all-weather construction at a considerably lower cost than we have experienced in the past.

As announced a year ago, your company is still actively involved in research involving the electrolysis of water to generate hydrogen and heavy water using surplus hydroelectric energy. We are also involved in a solar energy utilization study in Ontario. Our electronic pig program has significantly moved ahead during the past few months and is now recognized as an extremely important device for examination of existing pipelines and for testing of newly constructed gas and oil pipelines.

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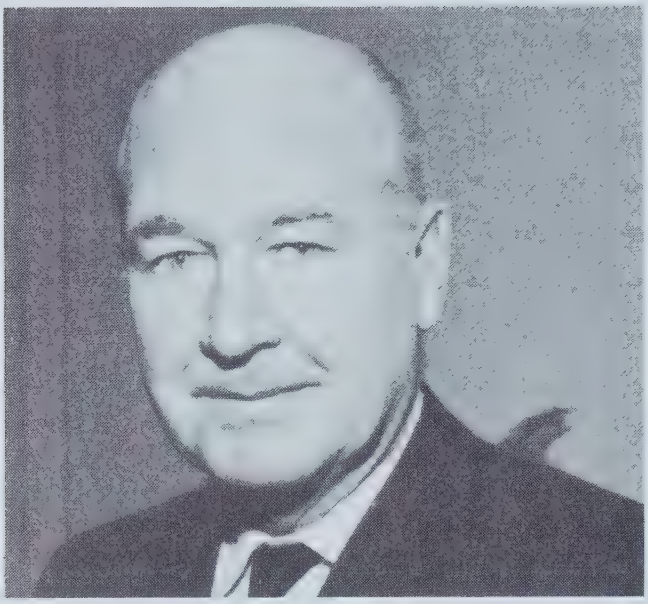

SLIDE NO. 12
Deane Nesbitt

It is with sincere regret and a deep sense of loss that I must comment on the passing of Deane Nesbitt last February. Deane had a very unfortunate skiing accident which proved to be fatal. He had been on our Board of Directors since 1954 - four years before our company commenced operations. During the 24 years that he served, no other Director made a greater contribution to the success, welfare and prosperity of your company. None of us on the Board of Directors or in management will ever forget Deane, his sound judgement and business acumen. To commemorate the contribution that Deane made to TransCanada, we are in the process of establishing an appropriate memorial at the Montreal General Hospital.

SLIDE NO. 13
Robert Jones

We are fortunate to be able to have Robert H. Jones of Winnipeg join our Board of Directors. Mr. Jones is President and Chief Executive Officer of The Investors Group in Winnipeg, and his financial and business experience will be an important asset to our deliberations. We are particularly pleased that we will now have a representative from Manitoba on our Board.

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There are many reasons why all of us involved in TransCanada should be optimistic about future prospects. The skills and strengths of our employees, and the continuation of dedicated effort and reliable judgement that they have exhibited in the past are extremely important ingredients in the ability of your company to handle the challenges that lie ahead. The profitable development of TransCanada during the past twenty years is the result of the enthusiasm and expertise of its men and women, and we sincerely believe that this important asset will continue to provide prosperous growth in future years.

TransCanada PipeLines

Proceedings at the Annual and Special General Meeting of Shareholders

Wednesday, April 4, 1979
Toronto, Ontario

Annual and Special General Meeting of Shareholders of TransCanada PipeLines

Royal York Hotel, Toronto, Ontario, Wednesday, April 4, 1979

Highlights

James W. Kerr, Chairman and Chief Executive Officer, addressed the meeting and his remarks are included in this booklet.

By-law No. 31 reducing the number of Directors from 16 to 15 was passed.

Directors elected for the ensuing year were:

John M. Beddome
James M. Cameron
John H. C. Clarry, Q.C.
John H. Coleman
A. Jean de Grandpré
John P. Gallagher
Russell E. Harrison
Robert H. Jones
James W. Kerr
Gordon P. Osler
Herbert C Pinder
Smiley Raborn, Jr.
William E. Richards
Frank A. Schultz
George W. Woods

Officers of the Company for the ensuing year appointed by the Board of Directors following the Annual Meeting were:

James W. Kerr, Chairman and Chief Executive Officer

George W. Woods, President

James M. Cameron, Executive Vice-President

Walter Hindle, Group Vice-President and Executive Engineer

John K. Archambault, Vice-President and General Counsel

Gordon A. Leslie, Vice-President, Customer Relations and Planning

C. Kennedy Orr, Vice-President, Alberta Affairs

Richard D. Walker, Vice-President, Gas Transmission

George C. Britton, Vice-President, Engineering and Operations — Pipeline

Bruce M. Escoffery, Vice-President, Rates

George M. Hugh, Vice-President, Engineering and Operations — Compression

H. Neil Nichols, Vice-President and Treasurer

Raymond F. Sim, Vice-President, Administration

Kenneth G. Whiteside, Vice-President and Controller

Arthur A. Wilkins, Vice-President, Gas Supply

Donald M. Johnston, Corporate Secretary

Martin Berman, Assistant Secretary

E. W. Howard Mallabon[e] Assistant Secretary

Peat, Marwick, Mitchell were appointed auditor[s] for the current year.

(Left to Right):
Standing:
J. M. Beddome
H. C. Pinder
R. H. Jones
J. P. Gallagher
J. H. C. Clarry
R. E. Harrison

Sitting:
W. E. Richards
G. P. Osler
J. H. Coleman
F. A. Schultz
J. M. Cameron
J. W. Kerr
G. W. Woods
J. R. Tolmie
S. Raborn, Jr.
A. J. de Grandpré

Remarks by James W. Kerr
Chairman and Chief Executive Officer

Ladies and Gentlemen:
I am again very grateful for this opportunity to review the highlights of TransCanada operations and to make a few comments on the challenges and opportunities of the Canadian natural gas industry. It is a great pleasure to welcome you to this Annual and Special General Meeting. Your continued support and interest in TransCanada affairs is sincerely appreciated.

In 1978 TransCanada PipeLines completed the twentieth year of operation of its natural gas transmission system. From a financial point of view we again set some new records during the year.

Operating Results

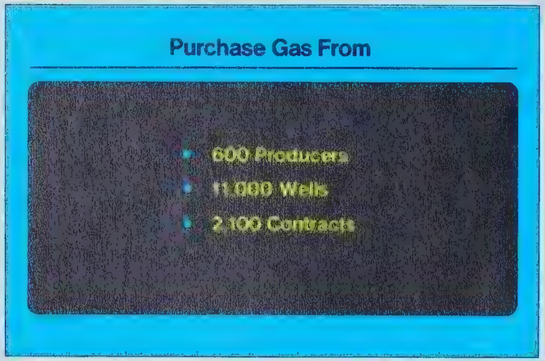
	1978	1977
Net Income	$95,099,000	$86,183,000
Net per Share	$2.20	$2.01

Net income reached $95,099,000.00, up from $86,183,000.00 in 1977. Net income per common share was $2.20, up from $2.01 in 1977.

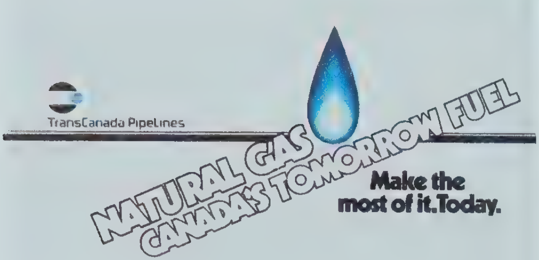
At the end of last year the Anti-Inflation Board limitations on dividend rates were no longer in effect, and we were able to increase the annual rate of dividends effective January 31, 1979 from $1.03 to $1.16, an increase of 12.6%. As a responsible Canadian corporation we wanted to demonstrate

Canadians, but they have made a very significant contribution to Canada's balance of payments.

As you are aware, TransCanada PipeLines has been a major force and factor in the development of the Canadian gas industry. We have under contract about 28 trillion cubic feet of natural gas — about one-third of Canada's proven reserves.



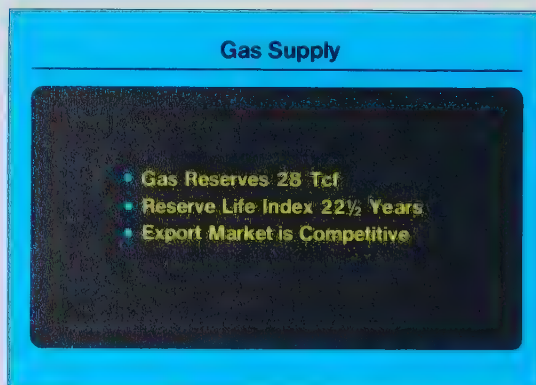
We purchase from over 600 producers in western Canada and our gas comes from over 11,000 gas wells under 2,100 contracts. We are presently the major supplier for Saskatchewan, Manitoba, Ontario and Quebec. We also make substantial exports to the United States. And for twenty years we have entered into these gas purchase contracts in Alberta to meet the future requirements of the market areas we serve.



The second point I would like to make is that natural gas has become Canada's fuel of the future. As a nation we are not so fortunate with oil. Unless frontier oil can be brought to market, we will probably run into increasing imports in the mid-1980's — if we can get them. To reduce oil consumption, natural gas will have to be made available to many more areas of Canada.

However, let me emphasize again that exploration for both oil and gas has to continue at a high level. Each well drilled by an exploration company is capable of discovering oil or gas. As you probably know, oil is often discovered during exploration for gas.

TransCanada's role in the Canadian energy scene can only get larger. Our purchases for the future needs of the Canadian market must be made several years in advance. Since 1977 we have not made any new purchases of Canadian gas. Drilling by producers on lands already committed to us added reserves of approximately 1 trillion cubic feet, or approximately 75% of the volume of gas we used in 1978.



As I indicated earlier we have 28 trillion cubic feet of gas reserves available to us. In this way we have a reserve life index of 22½ years. This compares to the reserve life index of major American pipelines of 10 years. I can assure you that many natural gas transmission companies in the United States would like very much to have the abundant and

dependable long term supply and the opportunities it presents, that your Company enjoys.

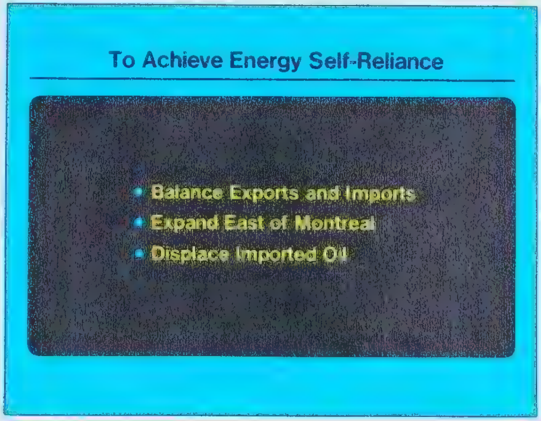
The rising prices for oil and gas are at least a contributing factor in the slowdown of the overall Canadian economy, just as they have been a factor in the slowdown of the American economy. Increased prices have initiated massive efforts by industry to conserve energy — and that part is good. But these higher prices have also diverted resources from plant modernization and expansion, and this has created problems in the marketplace where gas and other forms of energy are used. In all forms of energy — electricity, oil, natural gas — actual 1978 growth was less than forecast.

The cumulative results of drilling by producers operating on lands committed to us, along with conservation and slower-than-forecast market growth, has left us in a position where, in 1978, we paid $146 million to defer delivery of gas under our gas purchase contracts. The carrying charges on this sum are included in our Alberta cost of service. In 1979 we expect that our cumulative take or pay liability will increase again by a similar amount.

As I mentioned earlier, the bright side of the picture is that TransCanada's gas supply has never been stronger. We can contract for both domestic and export sales with absolute confidence in our ability to deliver. Based on the Company's current supply estimates and market forecasts, all the gas which the Company will be required to pay for, but not take, will be recovered within the time periods specified in the contracts.

The answer to the problems and challenges which confront the Canadian gas industry is an increase both in domestic and export markets. This, as I have been saying in various public affairs appearances over the past two years, will not be as easy as some people think. The same high prices for energy that affect Canada have also affected the United States, which imports a higher percentage of its energy than Canada — particularly oil. The United States, like Canada, wishes to achieve self-reliance. That means that long-term imports of foreign-produced natural gas, either by pipeline or LNG carrier, are going to be scrutinized very carefully by any United States government.

The short-term high priority needs of United States distributors are currently nearly in balance with deliverable U.S. domestic gas supplies. Some areas have a small gas surplus and United States regulatory authorities are asking industries to switch from oil to gas. There have been new discoveries made in the Rocky Mountain areas of the western United States. Large volumes of natural gas may become available to the United States from Mexico. Mexico can also be a source of oil to the United States and therefore has a high trump card. There are also many potential suppliers of offshore LNG. To conserve foreign exchange, the present United States administration places a high priority on construction of the gas line from Alaska. So we in Canada will have to face the economic facts of life in the energy business.

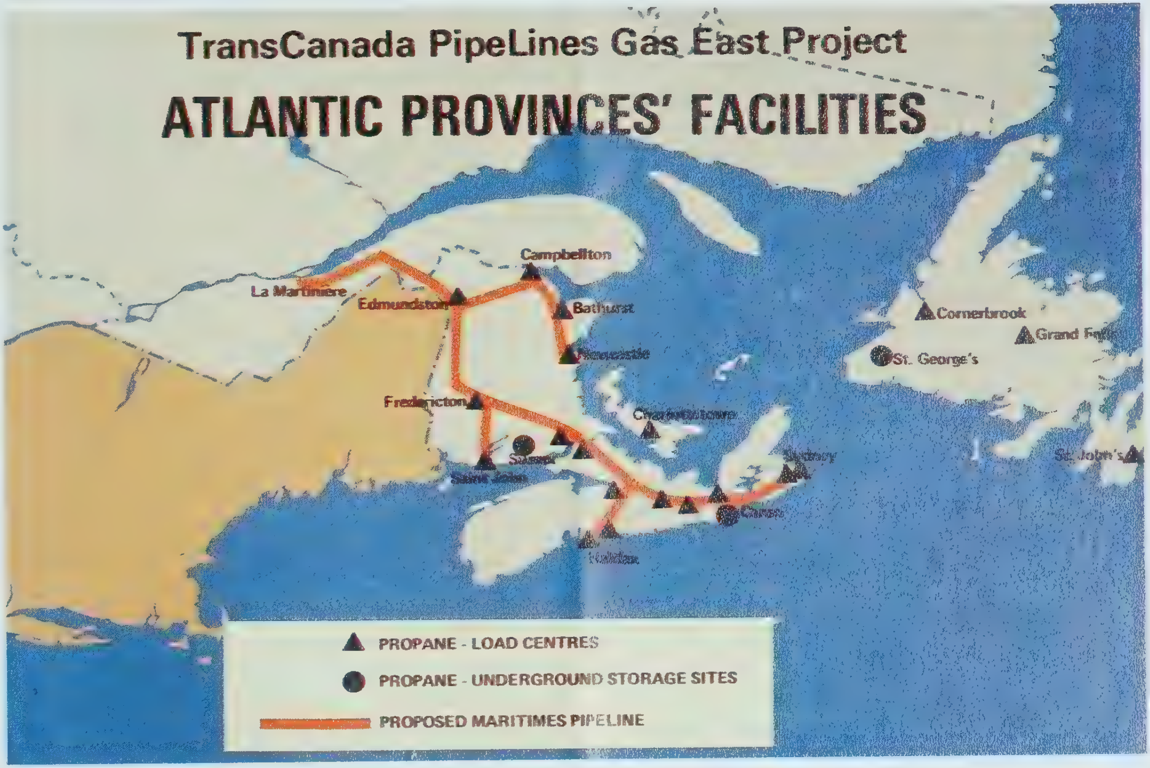


In current terms, the aim of the Canadian federal and provincial governments is to balance Canadian energy imports and exports in such a manner that Canada can be said to be self-reliant in terms of energy. The most immediately practical application of this policy is to Quebec markets east of Montreal, and to markets in the Atlantic Provinces. The basic objective would be to displace imported oil with domestically-produced energy, whether it be oil, natural gas, propane or electrical energy.

It is acknowledged by everyone that parts of Quebec and the Atlantic Provinces will be a difficult market to serve. Much of Quebec's industrial strength is in the Montreal area which has been served with natural gas since 1958. Other industrial areas, such as Lac St. Jean and Sept. Iles are hundreds of miles from existing natural gas sources. The proposals we will be making to the National Energy Board will make natural gas available in Quebec to over 70% of the population as contrasted to the present 50%. We are also proposing to construct a small-scale LNG facility near Quebec City. This will provide security for a single line east of Montreal in the event of interruption of service. It will also provide gas peaking service for Quebec City. But possibly more important, it will provide LNG for movement by barge or truck to several Quebec communities.

Here is a typical LNG truck which is regularly used by one of our customers in providing LNG export service.

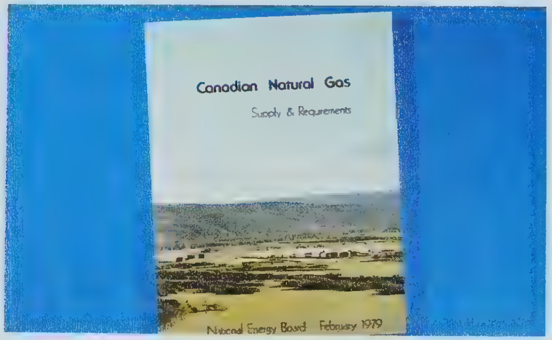
We have been engaged in very detailed planning



in Quebec — talking to municipal officials, and in particular to municipal planners, so that the transportation system we design will do the most for Quebec communities, and in particular for Quebec's industrial parks. This is not the type of approach which leads to newspaper headlines, but we feel that in the end our project will be found to be more economic, and we believe it is soundly based.

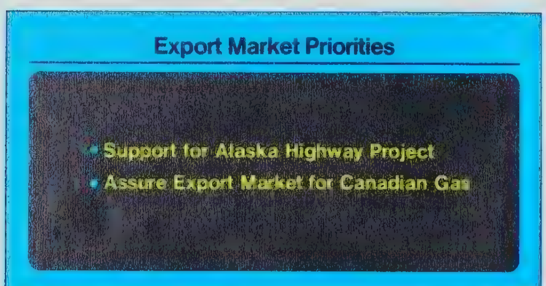
Our expansion in Quebec will require considerable looping of our present system, including the possibility of a lateral from North Bay to Montreal. This lateral, if built, would bring natural gas service to some additional communities in the Ottawa River Valley.

The Atlantic Provinces are more vulnerable than any other area of Canada to interruption of imported energy for any reason. These provinces are facing extremely high costs of electrical energy, have unused refinery capacity, and are 3000 miles from the conventional gas-producing areas in Alberta. In addition, the population is very scattered, with relatively few large industrial loads to provide a basis for the economy of scale which can be achieved by large-diameter gas transmission lines. We are carefully examining all the energy options in the Atlantic Provinces, including the use of propane-air and liquefied natural gas, as a means of building markets in advance of the construction of a pipeline. Our aim is to provide Canadian indigenous energy in this area by the method which is best for the consumer, and by the method which creates the lowest possible revenue deficiency.



The recent report of the National Energy Board on Canadian Gas Supply and Requirements was an important document for the future of the gas industry in Canada. I think that everyone, including perhaps members of the Board itself, regretted that the public hearings on oil and on gas were conducted separately. In the future it is hoped that they can be combined.

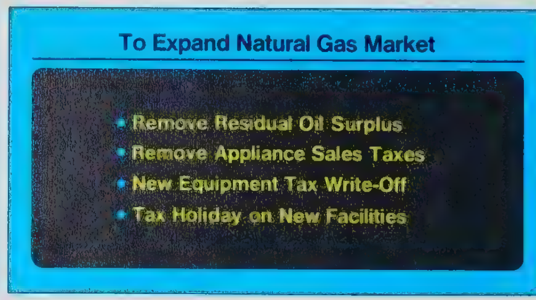
I think it will be generally accepted that the new tests devised by the Board will assure that Canada's future natural gas requirements will be safeguarded prior to the granting of new export licenses. It is vital, however, at this stage that the National Energy Board review oil and gas situations at least once a year so that its demand and supply evidence is constantly updated.



I want to emphasize that we in TransCanada fully support the building of the Alcan Highway Project to connect Prudhoe Bay reserves with the United States markets. I believe it is clear that the portions of the line in the lower 48 States should only be built after satisfactory assurances have been obtained that the entire project will be completed.

I also believe that in allocating the reserves available for export, priority should be given to the extension of existing export licences, and in particular priority should be given to those areas which are entirely dependent on Canada for their natural gas supplies.

It is absolutely vital to the Canadian economy, as well as to TransCanada, that both the domestic and export markets continue to expand. The rate of expansion of both markets will depend on the growth of both the Canadian and U.S. national economies. We agree with the policy of moving Canadian prices towards world prices for energy. However, in making these upward movements, governments must keep in mind the effects that such increases can have on inflation and unemployment.



If the federal and provincial governments are sincere in their desire to replace, as far as possible, foreign imports of oil with Canadian-produced natural gas, they must help to remove the surplus of residual oils from the Canadian market. The selling price of this surplus oil is whatever is necessary to sell it. Without government action, and assuming that the interruption in deliveries from Iran is not prolonged, it is recognized that it will be difficult to increase natural gas sales in the industrial sector of the market. The provincial governments of the areas into which expansion is proposed can assist by removing sales taxes on natural gas, and on gas

appliances and heating equipment. Special income tax allowances and write-offs on new equipment to induce conversion to natural gas would also be important. A "tax holiday" on new transmission and distribution facilities for a development period would also assist.

Last August, the Canadian Pacific group sold its common share holdings to Dome Petroleum Limited and subsequently Robert W. Campbell, Ian D. Sinclair and John M. Taylor resigned from our Board of Directors.

Bob Campbell joined our Board in 1961 when he was still with Home Oil, and over the years kept us informed of developments in Alberta's oil and gas fields. Ian Sinclair, who came to our Board in 1966, was a tower of strength to the management of our Company during the 13 years he was a Director. John Taylor, who joined the Board in 1971, aided us greatly in our involvements in Arctic studies, and gave to our Board the viewpoint of the independent producers in Alberta.

On October 4, 1978, Jack Gallagher, Chairman and Chief Executive Officer of Dome Petroleum Limited, Bill Richards, President of Dome Petroleum Limited, and John Beddome, Senior Vice-President of Dome Petroleum Limited, became Directors of the Company. I am sure this is the beginning of a long and happy relationship between Dome and TransCanada PipeLines.

J. R. Tolmie

In 1951, the Ottawa law firm of Herridge, Tolmie incorporated a Special Act Company of the Parliament of Canada called TransCanada PipeLines, and since April, 1951 Ross Tolmie has been a valued member of our Board of Directors. Through our early and formative years, Ross Tolmie appeared at many hearings of the former Board of Transport Commissioners on our behalf. When TransCanada became an operating company, Mr. Tolmie kept us well informed on public affairs from the nation's capital. More recently he has served in the very important role of Chairman of the Audit Committee. Having now reached retirement age he is leaving the Board of Directors. Today I wish to thank him on your behalf for 28 years of dedicated service to this Company, starting as its first President and continuing as a Director and important shareholder.

In concluding my remarks may I stress that there is still a great future for natural gas in Canada. I am optimistic about our corporate opportunities and am only concerned that government policy decisions must be taken more rapidly if we are to realize and take advantage of them. This country can no longer afford regulatory hearings in energy matters which last months and years. We can no longer afford delays in dealing with applications for expansion or for export.

For our part, TransCanada PipeLines is, as always, anxious to co-operate with regulatory bodies to make sure that necessary actions and developments for the continued benefit of our industry, and for the national economy, take place as quickly as possible.

As TransCanada looks forward to exciting developments of the future I am certain that the high quality and expertise of our management team, and the willingness and enthusiastic performance of our experienced and skilled employees, will result in profitable continued growth and prosperity for your Company.

Thank you very much.

Scenes from the Annual and Special General Meeting of Shareholders.







International Gas Union / Union Internationale de l'Industrie du Gaz

14th World Gas Conference — **Toronto May 27-June 1 1979**

14e Congrès Mondial du Gaz — **Toronto 27 mai-1er juin 1979**

From May 27 to June 1 the 14th World Gas Conference sponsored by the International Gas Union will be held in Toronto. The IGU represents over 95% of the global gas industry, and this is the first time the conference has been held in Canada.

Over 1200 delegates and 600 spouses representing 36 countries are expected to attend.

The President of the International Gas Union is James W. Kerr, Chairman and Chief Executive Officer of TransCanada PipeLines.

Technical Assessment

The main purpose of the Conference will be the presentation and discussion of 66 technical papers prepared by 134 authors representing 22 nations.

In addition there will be three theme papers and three national papers . . .

Theme Papers

"Framework for the Future — Past Lessons Learned??" . . . J. A. Armstrong, President and Chief Executive Officer, Imperial Oil Limited, Toronto, Ontario, Canada.

"Gas — the Road Ahead" — Sir Denis E. Rooke, C.B.E., Chairman, British Gas Association, United Kingdom.

"Energy Policy and the Role of Gas — a North American Perspective" — Professor Henry D. Jacoby, Director, Centre for Energy Policy Research, Massachusetts Institute of Technology, U.S.A.

National Papers

"The North Sea and its Importance to the Gas Industry" — a symposium to be presented by a panel of five speakers — Dr. Christopher Brecht, Federal Republic of Germany (Chairman); R. Upton-Hansen, Denmark; Yves Delavesne, France; Arve Johnsen, Norway; and William J. Walters, United Kingdom.

"Current and Future Developments in the Soviet Gas Industry" — Dr. S. A. Orudjev, Minister of the Gas Industry, U.S.S.R.

"Developments in the Natural Gas Industry of Algeria" — Nordine Ait-Laoussine, Executive Vice-President, Sonatrach, Algeria.

Gas Industry Exhibition

A major industry exhibition will be held in conjunction with the Conference and many international organizations, gas industry groups and manufacturers will display and demonstrate the latest developments in facilities, research, processes, materials, equipment and related services.

Marketing Colloquium

Another highlight of the Conference will be an International Colloquium about Gas Marketing on June 1, under the direction of its President, Leonard Fish, Senior Vice-President, Industry Programs and Services, American Gas Association.

At this session a panel discussion on "Gas Marketing — the Key to Rational Use of Energy" will be presented, with panelists from Belgium, the Federal Republic of Germany, Spain, the United Kingdom and the United States. Subjects will include development of future markets as well as developments in new gas-fired equipment and appliances and energy conservation methods. In addition, new trends and developments in the global gas industry will be discussed with special emphasis on the importance of communicating the advantages of natural gas to consumers.

Social Events

Social events include an opening night reception in the Royal York Hotel, a gathering at the unique Ontario Place and a closing party at the Ontario Science Centre.

A special program has also been designed for spouses attending the Conference, including sightseeing tours to Niagara Falls, the Royal Ontario Museum, the Art Gallery of Ontario and a visit to the CN Tower.

Many industry tours will enable delegates to visit a variety of gas industry installations, research centres and manufacturing facilities.

The Organizing Committee has also arranged an interesting selection of 12 pre-Conference and post-Conference tours within Canada, including Quebec City, the James Bay Development and Churchill Falls, and trips to Alberta, Canada's major gas-producing province, the Arctic and the Yukon.

AR32

TransCanada PipeLines

NOTICE OF ANNUAL AND SPECIAL GENERAL MEETING

The Annual and Special General Meeting (the "Meeting") of the common shareholders of TransCanada PipeLines Limited will be held in the Ontario Room, Royal York Hotel, Toronto, Ontario, on Wednesday, April 4, 1979, at 10:00 o'clock a.m., Toronto Time.

The Meeting will:

(i) receive the 1978 Directors' Report, the 1978 Financial Statements and Auditors' Report;
(ii) appoint Auditors and elect Directors for 1979; and
(iii) consider and, if thought fit, confirm By-law No. 31, being a By-law decreasing the number of Directors from 16 to 15; and
(iv) deal with other business which arises and is properly before it.

Even if you plan to attend the Meeting the enclosed proxy should be completed and returned to ensure your representation.

DATED at Toronto, Canada this 7th day of March, 1979.

By order of the Board,

D. M. JOHNSTON,
Corporate Secretary.

MANAGEMENT PROXY CIRCULAR

To Our Shareholders:

The proxy enclosed is solicited by the Management of TransCanada PipeLines Limited (the "Company") to be used in connection with the Annual and Special General Meeting of common shareholders to be held April 4, 1979 (the "Meeting").

The cost of preparing and mailing all proxy and related material will be borne by the Company. The persons named in the proxy are officers of the Company. While most proxies will be solicited by mail, some shareholders may also be approached personally or by telephone.

Your proxy will be voted on any ballot that may be called for in accordance with your instructions. **If no instructions are given concerning any matter, your proxy will be voted in favour of such motion.**

You may revoke a proxy by instrument in writing executed by you or your attorney authorized in writing (or, in the case of a corporation, under its corporate seal or by a duly authorized officer or attorney), and deposited either at the head office of the Company at any time up to and including the last business day preceding the day of the Meeting or with the Chairman of the Meeting on the day of the Meeting or adjournment thereof.

RECORD DATES FOR VOTING AND FOR DEPOSIT OF PROXIES

The Board of Directors of the Company has fixed March 6, 1979 as the record date as of which common shareholders of the Company entitled to vote at the Annual Meeting will be determined. As to the confirmation of By-law No. 31, the Meeting will be constituted as a Special General Meeting of common

shareholders. There is no record date for determining the common shareholders of the Company entitled to vote at the Special General Meeting, and all persons who are registered holders of common shares of the Company at the time of the Special General Meeting will be entitled to vote at such meeting. Each holder will be entitled to one vote in respect of the matters on which he or she is entitled to vote for each common share held. The Board of Directors has, however, fixed 5:00 p.m. (Toronto Time) on the 3rd day of April, 1979 as the time before which proxies to be used at the Meeting must be deposited with the Company or its agent.

VOTING SHARES

The number of outstanding common shares entitled to vote at the Annual Meeting as at March 6, 1979, is 40,166,130.

As at March 6, 1979, the only person or company to the knowledge of the directors or officers of the Company who or which beneficially owns, directly or indirectly, or exercises control or direction over shares carrying more than 10% of the votes attached to all shares of the Company is Dome Petroleum Limited. On October 2, 1978, pursuant to agreements entered into in August, 1978, Dome Petroleum Limited purchased 4,732,457 common shares of the Company from Canadian Pacific Investments Limited, and during August and September, 1978, purchased a further 4,287,764 common shares from other shareholders. As a result of these transactions, as at March 6, 1979, Dome Petroleum Limited beneficially owns directly or indirectly and exercises control or direction over 9,020,221 of the Company's outstanding common shares (representing 22.46% of all outstanding common shares).

INFORMATION REGARDING BY-LAW NO. 31

The purpose of By-law No. 31 is to decrease the number of directors of the Company from 16 to 15. The text of the By-law appears on page 5. The percentage of votes required for the confirmation of By-law No. 31 is at least two-thirds of the votes cast at the Special General Meeting.

ELECTION OF DIRECTORS

The Board of Directors presently consists of 16 directors, and if By-law No. 31 is confirmed at the Meeting, will consist of 15 directors. Unless otherwise directed, the persons named in the enclosed form of proxy intend to vote at the Annual Meeting for the election of the following nominees, all of whom are now directors of the Company. Should any nominee for director become unable or unwilling to accept nomination for election or should By-law No. 31 not be confirmed at the Meeting, the persons designated in the enclosed form of proxy intend to vote for any other person recommended by the management of the Company. Management has no reason to believe that any of the nominees named below will be unable or unwilling to serve if elected. Each director elected will hold office until the next Annual Meeting or until his successor is duly elected.

The persons proposed to be nominated for election as directors, all other major positions and offices with the Company now held by them, their principal occupations or employments, the year in which they became directors of the Company, and the approximate number of shares of each class of shares of the Company beneficially owned, directly or indirectly, by each of them or over which control or direction is exercised by each of them, as at March 6, 1979, are:

	Became Director	**Common Shares (Note)**
John M. Beddome, of Calgary, Alberta, has been Senior Vice President of Dome Petroleum Limited, Calgary, (Oil and Gas Exploration) since March 17, 1976, and prior to that time was a Vice President of Dome Petroleum Limited.	Oct. 4, 1978	750
James M. Cameron, of Toronto, Ontario, is Executive Vice President of the Company.	Apr. 13, 1977	1,560
John H. C. Clarry, Q.C., of Toronto, Ontario, is a Partner of Messrs. McCarthy & McCarthy, Barristers and Solicitors, Toronto.	Apr. 14, 1976	1,100
John H. Coleman, of Toronto, Ontario, is President of J.H.C. Associates Limited, Toronto. (Consultants)	Mar. 4, 1970	300
A. Jean de Grandpré, Q.C., of Montreal, Quebec, is Chairman and Chief Executive Officer of Bell Canada, Montreal. (Telecommunications Company)	Mar. 7, 1973	600

Raborn, Jr., a director of the Company, is an officer, director and shareholder of CanDel Oil Ltd. Messrs. John E. P. Gallagher and William E. Richards, directors of the Company, are officers, directors and shareholders of Dome Petroleum Limited. Mr. John M. Beddome, a director of the Company, is an officer and shareholder of Dome Petroleum Limited.

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Company maintains directors' and officers' liability insurance with a policy limit of $10,000,000 per occurrence subject to deductibles as follows: in respect of directors and officers — $7,500 each individual or $15,000 all persons for each loss plus 5% participation in each loss in excess of the deductible to a maximum of $50,000; in respect of corporate reimbursement — $50,000 for each loss plus 5% participation in each loss in excess of the deductible to a maximum of $50,000. Generally speaking, under this insurance the Company is reimbursed for payments made under corporate indemnity provisions on behalf of its directors and officers and individual directors and officers are reimbursed for losses arising during the performance of their duties for which they are not indemnified by the Company. Excluded from coverage are illegal acts and those acts which result in personal profit. For the year ended December 31, 1978, the total annual premium in respect of such insurance was $31,418 of which $29,279 was paid by the Company. Of this amount $12,279 was paid in respect of directors as a group and $17,000 in respect of officers as a group. Amounts of $897 and $1,242 were paid by such directors and officers respectively.

OTHER BUSINESS

The enclosed form of proxy gives discretionary authority to the persons named to vote on other matters coming before the Meeting. At the present time the management of the Company knows of no other matters. If any such matters come before the Meeting, the persons named in the proxy will vote in accordance with their judgment on such matters.

DIRECTORS' APPROVAL

The contents of this Management Proxy Circular and its sending have been approved by the directors of the Company.

D. M. Johnston
Corporate Secretary

Toronto, Canada
March 7, 1979

BY-LAW NO. 31

Being a By-law to decrease the number of Directors.

BE IT ENACTED AND IT IS HEREBY ENACTED as a By-law of TransCanada PipeLines Limited (hereinafter called the "Company") that:

1. Effective April 4, 1979, the number of Directors of the Company be and the same is hereby decreased from sixteen (16) to fifteen (15) so that the Board of Directors of the Company shall thereafter be composed of fifteen (15) Directors.
2. All prior By-laws of the Company inconsistent herewith are hereby repealed in order to give the effect to this By-law.

ENACTED this 7th day of March, 1979.

WITNESS the Corporate Seal of the Company

(s) J. W. Kerr
Chairman and Chief Executive Officer

(s) D. M. Johnston (c/s)
Corporate Secretary

	Became Director	Common Shares (Note)
John P. Gallagher, of Calgary, Alberta, has been Chairman and Chief Executive Officer and Chairman, Executive Committee of Dome Petroleum Limited, Calgary, (Oil and Gas Exploration) since 1974, and from 1953 to 1974 was President of Dome Petroleum Limited.	Oct. 4, 1978	500
Russell E. Harrison, of Toronto, Ontario, is Chairman and Chief Executive Officer of Canadian Imperial Bank of Commerce, Toronto. (Canadian Chartered Bank)	Apr. 14, 1976	400
Robert H. Jones of Winnipeg, Manitoba, is President and Chief Executive Officer of The Investors Group, Winnipeg. (Financial Services Holding Company)	Apr. 5, 1978	500
James W. Kerr, of Toronto, Ontario, is Chairman and Chief Executive Officer of the Company.	Dec. 3, 1958	7,803
Gordon P. Osler, of Toronto, Ontario, is Vice Chairman of the Board of Directors and Chief Executive Officer of British Steel Corporation (Canada) Limited, Toronto and Chairman of the Board of Directors of Slater Steel Industries Limited, Hamilton. (Holding and Trading Company)	Apr. 30, 1954	750
Herbert C. Pinder, of Saskatoon, Saskatchewan, is Secretary-Treasurer and a director of The Saskatoon Drug & Stationery Company Limited, Saskatoon, and President of Saskatoon Trading Company Limited, Saskatoon. (Wholesale and Retail Distributor)	Apr. 13, 1971	300
Smiley Raborn, Jr., of Calgary, Alberta, is Chairman and Chief Executive Officer of CanDel Oil Ltd., Calgary. (A Natural Resource Company)	Jan. 26, 1961	12,030
William E. Richards, of Calgary, Alberta, has been President of Dome Petroleum Limited, Calgary, (Oil and Gas Exploration) since 1974, and prior to that time was Executive Vice President of Dome Petroleum Limited.	Oct. 4, 1978	10,000
Frank A. Schultz, of Dallas, Texas, is an independent oil operator.	Apr. 13, 1951	2,586
George W. Woods, of Toronto, Ontario, is President of the Company.	Dec. 10, 1968	10,000

Note: The information as to shares beneficially owned or over which control or direction is exercised, not being within the knowledge of the Company, has been furnished by the respective nominee directors individually.

REMUNERATION OF DIRECTORS AND OFFICERS

During the fiscal year ended December 31, 1978, remuneration, as set forth in the table below, was paid by the Company to its directors and certain of its officers. Officers of the Company who are also directors do not receive directors' fees. Directors and officers of the Company do not receive remuneration from any subsidiary of the Company.

	Nature of Remuneration Earned		
	Directors' Fees	Salaries	Total
Remuneration of Directors who are not officers Number of Directors: 17*	$137,000	—	$ 137,000
Remuneration of Officers who received in excess of $40,000 Number of Officers: 18	—	$1,294,000	$1,294,000
Totals:	$137,000	$1,294,000	$1,431,000

Notes: * This number includes one director who passed away, and three directors who resigned during the year.
There were no bonuses, non accountable expense allowances or other form of remuneration paid by the Company or its subsidiaries.

The estimated aggregate cost to the Company and its subsidiaries in the fiscal year ended December 31, 1978 of all pension benefits proposed to be paid under any pension or retirement plan in the event of retirement at normal retirement age, directly or indirectly, by the Company or any of its subsidiaries to directors and officers is $137,100.

In January, 1979, the Company established an Employees Savings Plan under which the Company will in effect make annual contributions to all employees of the Company in common shares of the Company equal in value to 5% of an employee's basic earnings. Contributions will be made on December 31 in each year, the first contribution to be made on December 31, 1979 based on 1979 earnings of employees. Such contributions will be effected by the periodic purchase on the market of common shares by Canada Trust Company which will be credited to the accounts of the employees in accordance with the terms of the plan. Such contributions to be made on December 31, 1979 in respect of officers who will receive in excess of $40,000 remuneration cannot be ascertained at this time.

The maximum annual aggregate of all remuneration payments other than the foregoing proposed to be paid in the future by the Company or any of its subsidiaries to directors and officers of the Company pursuant to any existing plans or arrangements is $81,113.

As at March 6, 1979, J. K. Archambault and H. N. Nichols, officers of the Company, are indebted to the Company on account of loans in connection with the purchase of their residences. The largest aggregate amount of such indebtedness since January 1, 1978 and the present balance and rate of interest of such indebtedness with respect to Mr. Archambault are $58,069.17, $56,813.89 and 7% respectively, and with respect to Mr. Nichols are $69,795.16, $68,303.37 and 6% respectively.

INCENTIVE STOCK OPTION PLAN

At March 6, 1979, 201,003 common shares of the Company were reserved for the exercise of options granted or to be granted under the Company's Incentive Stock Option Plan to purchase common shares at a price per share equal to the average of closing bid prices of the common shares on the Vancouver, Alberta, Winnipeg, Toronto and Montreal Stock Exchanges on the day of grant. Since January 1, 1978, no stock options have been granted to directors and officers of the Company pursuant to such Plan.

From January 1, 1978 to March 6, 1979, directors and officers of the Company purchased common shares of the Company pursuant to stock options granted to them under the Plan as set out below:

Number of Common Shares Purchased	Quarterly Period	Purchase Price Range per share per Quarter		Price Range of Common Shares on Toronto Stock Exchange in thirty-day period preceding dates of purchase	
		Low	High	Low	High
19,800	Jan. 1-Mar. 31, 1978	8.729	13.510	14.625	15.250
13,428	April 1-June 30, 1978	10.542	14.063	14.000	15.875
4,500	July 1-Sept. 30, 1978	14.229	14.229	15.125	18.250
7,000	Oct. 1-Dec. 31, 1978	10.472	14.063	17.250	18.750
18,175	Jan. 1-Mar. 6, 1979	8.729	15.083	17.375	18.625

APPOINTMENT OF AUDITORS

The persons designated in the enclosed form of proxy intend to vote at the Annual Meeting for the appointment of Messrs. Peat, Marwick, Mitchell & Co., Chartered Accountants, Toronto, Ontario, as Auditors of the Company, to hold office until the Annual Meeting to be held in 1980 and to authorize the Board of Directors to fix the remuneration of such Auditors. Messrs. Peat, Marwick, Mitchell & Co. have been the Auditors of the Company for more than five years.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS OF THE COMPANY

Mr. John H. Coleman and Mr. Herbert C. Pinder, directors of the Company, are directors of The Royal Bank of Canada. Mr. Russell E. Harrison and Mr. James W. Kerr, directors of the Company, are directors of Canadian Imperial Bank of Commerce. Under loan agreements made December 15, 1978 with The Royal Bank of Canada and Canadian Imperial Bank of Commerce, the Company borrowed on December 29, 1978 $38,500,000 from each such Bank to fund certain of the Company's payments on future gas supply under gas purchase contracts with producers. The loans mature December 29, 1983, subject to the Company's right to prepay such loans at any time.

In the ordinary course of its business the Company purchases natural gas at competitive prices from many producers in western Canada, including CanDel Oil Ltd., and Dome Petroleum Limited. Mr. Smiley

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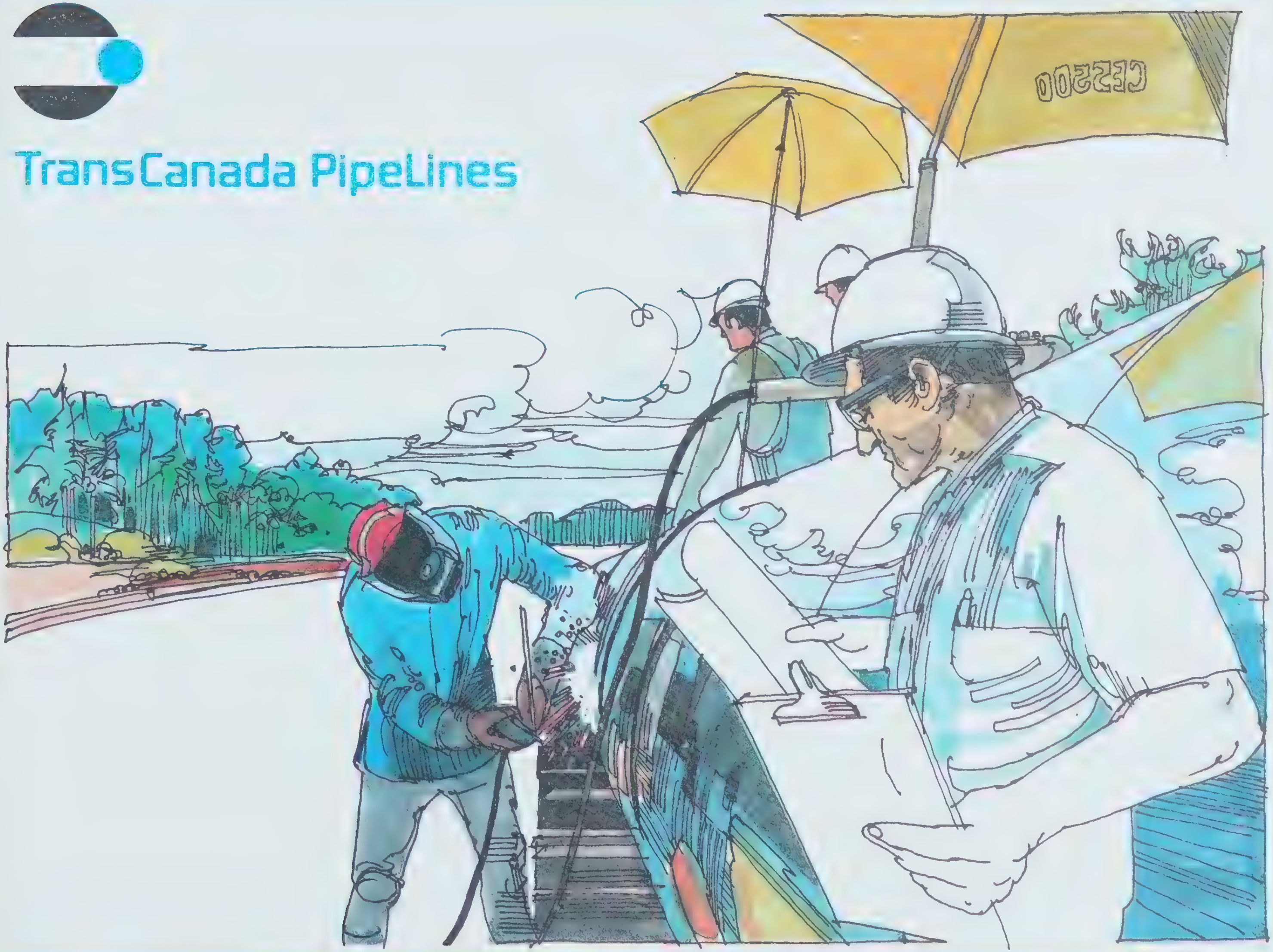
TransCanada PipeLines




SASKATCHEWAN
MANITOBA
Winnipeg
Kenora
Emerson
NORTH DAKOTA
MINNESOTA
Legend
Pipeline
Compressor Station
TransCanada PipeLines System
Great Lakes Gas Transmission System
Union Gas
MAP IS REPRESENTATIVE – NOT TO SCALE
SEPTEMBER, 1978

TransCanada PipeLines, P.O. Box 54,
Commerce Court West,
Toronto, Ontario M5L 1C2
(416) 869-2111

TransCanada PipeLines and the National Interest

Cover: Canadian suppliers provide more than 80 per cent of the goods and services employed in the construction and maintenance of the TransCanada PipeLines system.

TransCanada PipeLines, P.O. Box 54,
Commerce Court West,
Toronto, Ontario M5L 1C2
(416) 869-2111

TransCanada and the National Gas Industry

In less than a quarter of a century, the development of Canada's huge natural gas deposits has led to the formation of a new industrial sector almost unique in its scope and degree of Canadian ownership — the natural gas transmission and distribution industry.

With assets of nearly $8 billion, the Canadian-owned gas pipeline companies have built a grid that embraces 120 000 km (75,000 miles) of pipelines from British Columbia to Quebec, from the U.S. border to north of the 60th parallel. Natural gas accounts for one-fifth of all primary energy used in Canada, and more than one quarter of Canada's total energy production. Sales of natural gas to the United States now earn $2 billion in annual export revenues for Canada, while the volume of gas used by Canadians is equivalent to $4 billion worth of annual oil imports.

TransCanada PipeLines, more than 97 per cent Canadian-owned, is the largest single component of this industry. Its system stretches across more than three-quarters of the east-west length of Canada, supplying five million gas users in four provinces. More than half of the gas used in Canada, and 30 per cent of the gas exported to the United States, is transported by TransCanada.

Construction of the TransCanada PipeLines system, and the development of this new Canadian industry, was a formidable undertaking. Its successful accomplishment has been an important factor in Canada's prosperity during the 1960s and 1970s. Today, both the challenges and opportunities confronting the natural gas industry are even greater.

Canada today has a shortage of oil supplies, but enjoys an abundance of proven and potential supplies of natural gas. The future development and use of this resource will have far-reaching effects on the nation.

Natural Gas is Energy Plus

Natural gas is the second largest source of energy used in Canada. But it is much more than that.

Natural gas is used in the homes of more than eight million Canadians, for space heating, hot water, air conditioning, cooking. It provides 40 per cent of the fuel used in commercial establishments — offices, restaurants, stores, schools, hospitals and others — and more than one-third of all energy used by industry, in generating electricity, manufacturing cars, trucks, lumber, newsprint, glass, steel, even potato chips — in fact, most of the factory-made products that Canadians use every day.

Natural gas serves not only as fuel but along with crude oil supplies as the basic raw material for Canada's rapidly expanded petrochemical industry. From natural gas the petrochemical industry, and the manufacturers that it supplies, make fertilizers, pharmaceuticals, films, paint, synthetic rubber, clothing and plastic products in an endless array. Six per cent of the natural gas used in Canada in 1975 was used not as fuel but as feedstock for the petrochemical industry. This is expected to increase to nearly 11 per cent by 1980, when natural gas will account for more than half of the feedstock used by the petrochemical industry. In 1979 the petrochemical industry will complete a $2.5 billion expansion program which will double its 1975 production volume. The expansion will transform Canada from a net importer of petrochemicals (costing more than $420 million in 1977) to a net exporter.

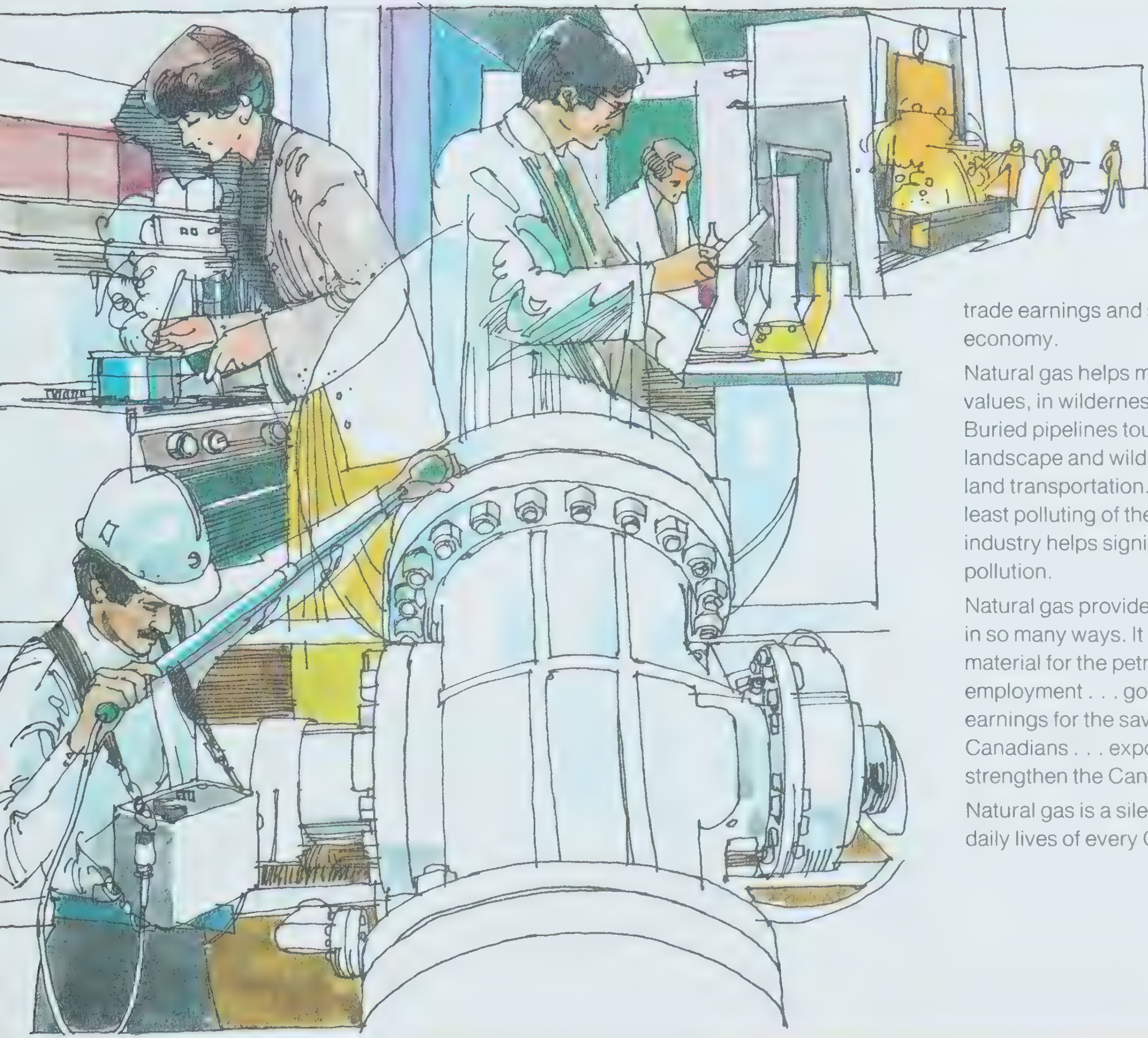
Natural gas provides jobs . . . jobs for hundreds of thousands of Canadians. Employment related to the gas industry includes jobs in finding, developing, producing and processing natural gas; in pipeline transportation and distribution; in industries that use natural gas as a fuel, and in the petrochemical industry that uses natural gas as a raw material. The Industrial Gas Users Association, comprising 20 large firms that employ natural gas in Ontario and Quebec, estimates that nearly 37,000 people are employed by its member firms in operations that use natural gas. The 20 IGUA firms account for only one-sixth of the natural gas used by industry in Canada. The petrochemical industry in 1976 employed 11,000 Canadians, while related employment in downstream industries was estimated to be at least 20 times greater.

Natural gas is a safe, reliable source of energy in the homes of more than 8 million Canadians . . . provides jobs for hundreds of thousands of Canadians . . . and as a non-polluting source of energy is vital to a number of industrial processes, from making steel to making potato chips.

Natural gas is also at the base of an unseen transportation industry, one of the largest industries owned by Canadians. By 1978 the grid of silent, buried pipeline transporting and distributing natural gas across most of the breadth and length of Canada extended 120 000 kilometres (75,000 miles), exceeding the total of operating railway trackage. Assets of the gas pipeline companies were more than $7.6 billion, and were more than 90 per cent Canadian-owned. Tens of thousands of Canadians share in the ownership and financial rewards of the gas transmission industry, while millions more have an indirect stake through insurance companies, pension funds and mutual funds which are the principal investors in pipeline companies.

Natural gas provides billions of dollars in government revenues, including royalty and lease payments on gas production, property taxes paid by pipelines to municipal and provincial governments, sales taxes and corporate income taxes.

Natural gas provides important international



trade earnings and savings for the Canadian economy.

Natural gas helps maintain environmental values, in wilderness and urban regions alike. Buried pipelines touch more lightly upon the landscape and wildlife than any other form of land transportation. Natural gas is by far the least polluting of the fossil fuels, and its use by industry helps significantly reduce air pollution.

Natural gas provides so much for Canadians, in so many ways. It provides energy . . . basic material for the petrochemical industry . . . employment . . . government revenues . . . earnings for the savings of millions of Canadians . . . export revenues that help strengthen the Canadian economy.

Natural gas is a silent, unseen servant in the daily lives of every Canadian.

A Larger Role for Abundant Natural Gas

Canada today has a shortage in its conventional supplies of crude oil, the principal source of energy, but has an abundant supply of natural gas, the second largest source of energy.

Greater development and use of Canada's natural gas can help reduce and offset the growing shortage of Canadian oil and win time for the subsequent development of other petroleum resources, such as those of frontier areas and the tar sands, which are not so readily accessible in economic terms.

But this will not be simple. Expanding the production and use of Canada's increasing reserves of natural gas, and assuring the long-term needs of Canadian users, will require both sound planning by industry and wise policy decisions by government.

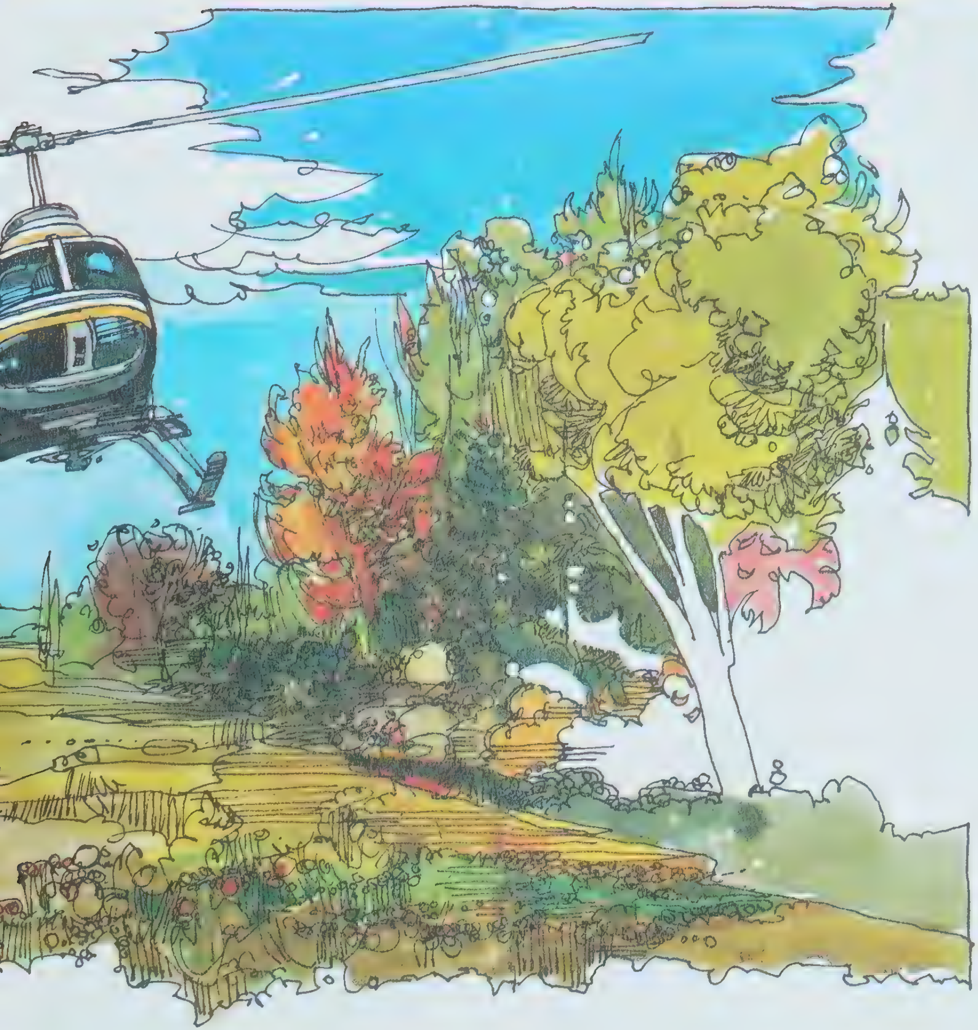
Indirectly, every Canadian pays for the ever-more expensive oil imported from the member nations of OPEC, the Organization of Petroleum Exporting Countries.

Conservation measures have been effective in utilizing energy more efficiently and in curbing energy demand, and they will continue to be of crucial importance. But conservation alone cannot resolve the problem of a shrinking supply of conventional oil reserves in western Canada. The large volumes of oil in the Athabasca oil sands and other heavy oil deposits are costly to develop, and sufficient extraction capacity cannot be brought on stream fast enough to fill the gap. Oil from the Arctic and offshore areas is promising, but is still on the horizon.

In 1978, Canada used 20 per cent more oil than it produced, and the net oil imports cost $2 billion. By the mid 1980s, net oil imports could cost from $3 billion to $5 billion annually, and the volatile politics of the Middle East may push the cost even higher.

Natural gas production, by contrast, exceeds Canadian use. Thirty-five per cent of Canada's gas production is now sold to the United States, and gas export revenues in 1978 equalled the cost of oil imports.

Increased natural gas prices have given us access to gas supplies which were previously not economical to produce. And increased exploratory drilling has accelerated the



discovery of new gas reserves. Twice as many exploratory wells were drilled in 1978 as in 1977.

By 1979, the proven reserves of natural gas in western Canada had increased to more than 66 trillion cubic feet, 20 times the annual production rate. This represents more than twice the energy of the country's conventional reserves of oil.

This is only part of the gas supply that Canada can anticipate. More gas remains to be found in western Canada, and the National Energy Board estimates that new discoveries here will total 38 trillion cubic feet during the 21-year period to 2000. In the Arctic and offshore areas, less than one per cent of the number of exploratory wells have discovered more than one quarter of the amount of gas found by 40,000 exploratory wells in western Canada. Some 14.5 trillion cubic feet of gas had been proved in the Arctic and offshore by 1978, not including recent large discoveries in the Beaufort Sea that have not yet been fully evaluated by the National Energy Board. Additional large volumes of natural gas, much

larger than presently available supplies, are locked in "tight" formations in western Canada. They could become economical to recover if further advances were made in production technology and prices continued to increase.

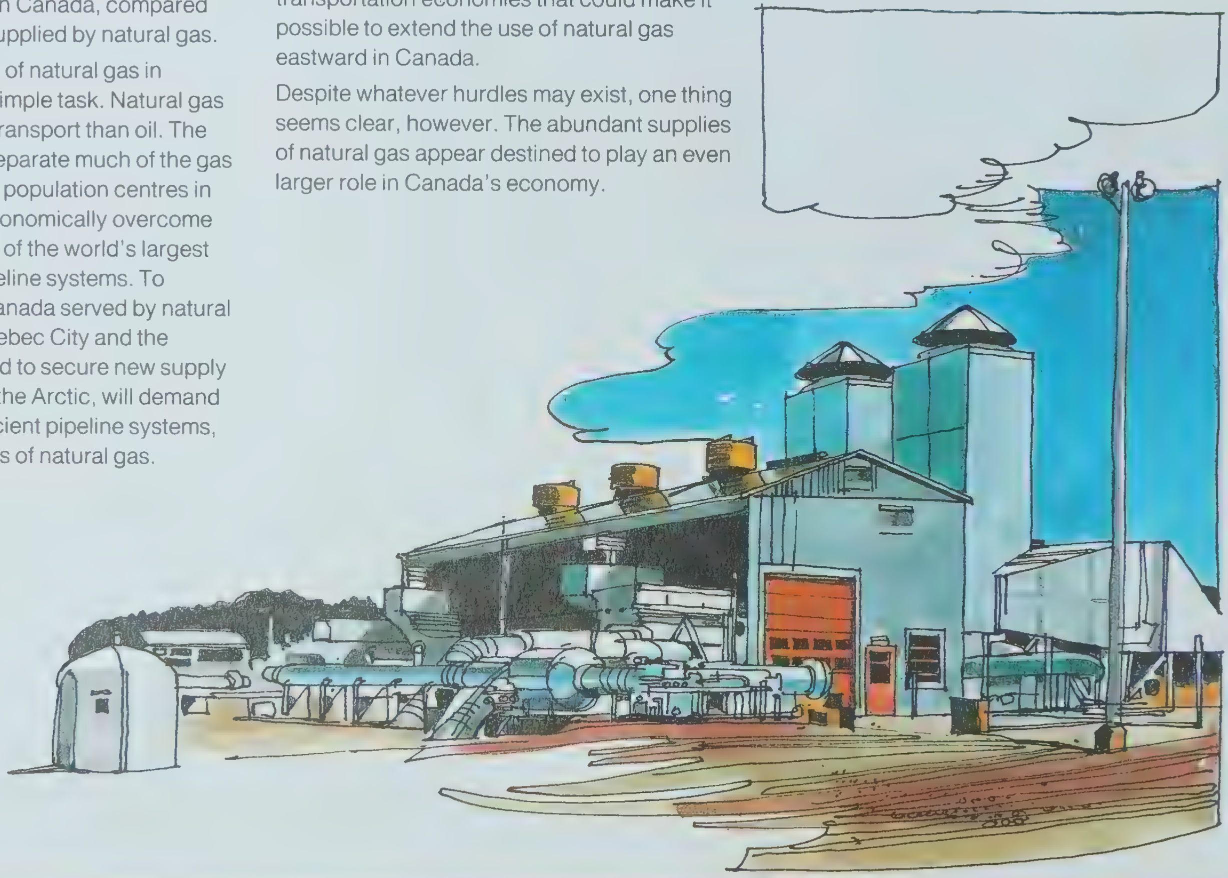
Oil accounts for more than 50 per cent of the primary energy used in Canada, compared with the 27 per cent supplied by natural gas.

Achieving greater use of natural gas in Canada will not be a simple task. Natural gas is more expensive to transport than oil. The great distances that separate much of the gas supply from the major population centres in Canada have been economically overcome only by building some of the world's largest and most efficient pipeline systems. To extend the areas of Canada served by natural gas farther east to Quebec City and the Atlantic Provinces, and to secure new supply sources as distant as the Arctic, will demand even larger, more efficient pipeline systems, carrying great volumes of natural gas.

Increased exports of natural gas to U.S. markets may do more than just help offset the rising cost of imported oil. While improving the cash flow of producers and thus permitting further exploration and development, additional gas exports might also be important in achieving the transportation economies that could make it possible to extend the use of natural gas eastward in Canada.

Despite whatever hurdles may exist, one thing seems clear, however. The abundant supplies of natural gas appear destined to play an even larger role in Canada's economy.

There are 48 compressor stations, from the Prairies to Ontario and Quebec, to keep natural gas flowing through the TransCanada PipeLines system.



TransCanada adheres to rigorous construction and operating standards to ensure safe, reliable service.

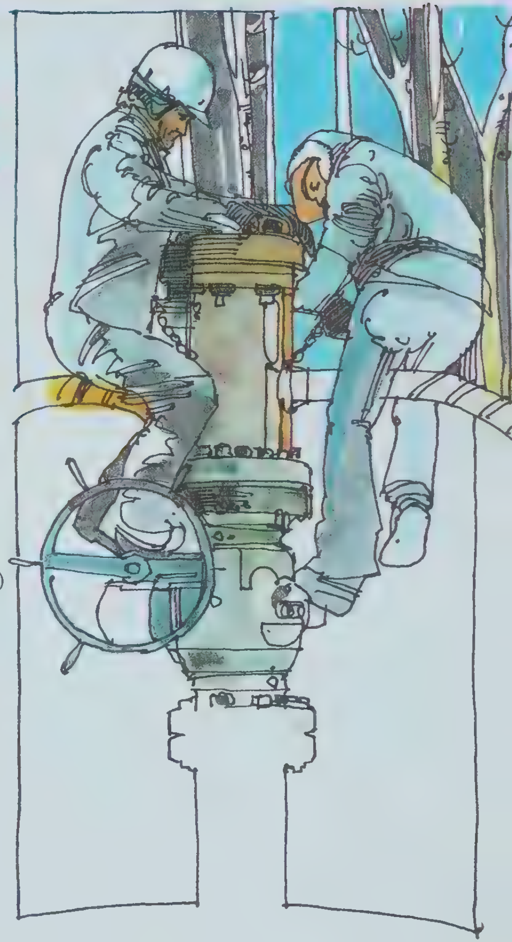
The Pipe that Crosses Most of Canada

The TransCanada PipeLines system spans more than three-quarters of the east-west breadth of Canada, along a right-of-way 4 000 km (2,500 miles) in length. From Alberta, the pipeline extends across Saskatchewan, Manitoba, Ontario and part of Quebec to Philipsburg on the International Border.

At the present time virtually all of the Company's natural gas comes from Alberta, transported through the facilities of The Alberta Gas Trunk Line Co. Ltd. Under more than 2,000 contracts the gas from some 11,000 wells is purchased from over 600 western Canadian producers. Under these agreements, 28 Tcf of gas reserves are committed to TransCanada, which gives the Company a reserve life index of over 22 years.

TransCanada sells natural gas to nine Canadian distribution companies at some 140 points in Saskatchewan, Manitoba, Ontario and Quebec, and to six customers serving United States markets. Export deliveries take place at four locations near the U.S. border: at Emerson and Spruce,

TransCanada PipeLines transports gas from the Alberta/Saskatchewan border by means of 48 compressor stations and more than 9 300 km (5,800 miles) of pipeline to nine Canadian distribution companies, and six United States customers.



Manitoba; Cornwall, Ontario; and at Philipsburg, Quebec. The Company also provides a gas transportation service for certain customers.

The TransCanada system includes more than 9 300 km (5,800 miles) of pipeline and 48 compressor stations, which keep an average of 85 million cubic meters (3 billion cubic feet) of gas a day flowing through the system at a speed up to 32 km an hour (20 mph) and at a pressure of up to 6 890 kPa (1,000 psi). The compressor stations, with a total of nearly 800 mW installed power (1 million hp), are located between 65 to 105 km (40 to 65 miles) apart. The compression comes from four sources: reciprocating engines, industrial type gas turbines, aircraft-type gas turbines, and electric motors.

These facilities by 1979 represented a total investment, at cost, of nearly $1.8 billion, compared with $256.6 million in 1958 when the original pipeline was completed.

The sizes of the pipelines range from 1 067 mm (42-inch) diameter to 203.2 mm (eight-inch) diameter pipe. The principal sections of the system consist of:

four pipelines, two 864 mm (34-inch), one 914 mm (36-inch) and one 1 067 mm (42-inch) in diameter, between Burstall, Saskatchewan and Winnipeg, 940 km (585 miles).

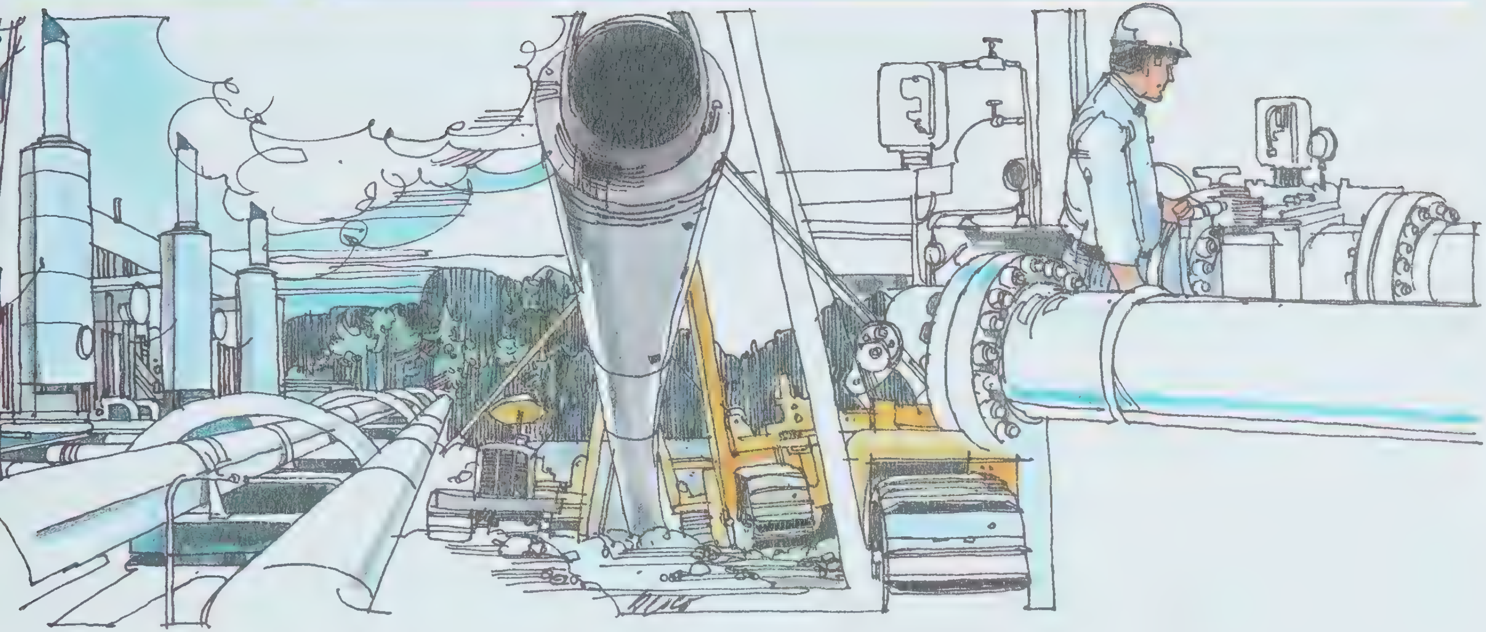
two pipelines, one 762 mm (30-inch) and one 914 mm (36-inch) in diameter between Winnipeg and Toronto, 1 950 km (1,210 miles)

two pipelines, one 508 mm (20-inch) and one 610 mm (24-inch) in diameter between Toronto and Montreal, 500 km (310 miles)

two pipeline extension to Ottawa, 304.8 and 406.4 mm (12 and 16 inches) in diameter, 60 km (35 miles).

two pipeline extensions, 762 and 914 mm (30 and 36 inches) in diameter between Winnipeg and Emerson to deliver gas to TransCanada's U.S. affiliate, Great Lakes Gas Transmission Company, and to Midwestern Gas Transmission Co.

Great Lakes Gas Transmission, owned 50 per cent by TransCanada, operates a 914 mm (36-inch) diameter pipeline through Minnesota, Wisconsin and Michigan to a point

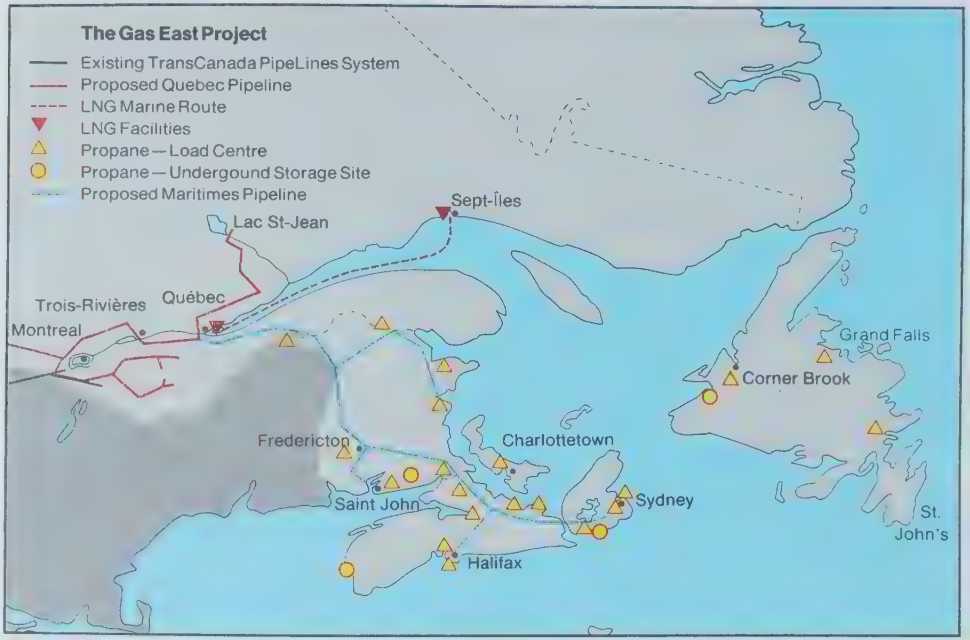


on the St. Clair river near Sarnia, Ontario, where it connects to the facilities of TransCanada. An extension of the Great Lakes system delivers natural gas to Sault St. Marie, Ontario.

The right-of-way for the TransCanada PipeLines system covers more than 16 000 hectares (40,000 acres), approximately two-thirds of which are private lands owned by more than 6,000 persons. The excellent relationships the Company has enjoyed for more than two decades with the private and public land-owners along the right-of-way attest to the effectiveness of its long-established policy to protect and enhance environmental values.

TransCanada adheres to rigorous construction and operating standards to ensure safe, reliable service. In 1978 the Company completed a program begun in 1968 of retesting the entire original pipeline system, some 3 680 km (2,290 miles) of pipe.

The National Energy Board regulates the construction of the Company's gas transmission facilities, the tariffs and tolls which the Company may charge for service, and the export of gas. Commencing August, 1978, the Company was allowed a rate of return on rate base of 10.75 per cent per annum. The price that the company pays for purchases of Alberta gas is determined by agreement between the Government of Canada and the Government of Alberta, persuant to Canada's Petroleum Administration Act and Alberta's Natural Gas Pricing Agreement Act.



The Past is Prelude

When TransCanada PipeLines was incorporated by a Special Act of Parliament on March 21, 1951, it proposed an undertaking that many people thought was impossible.

Natural gas then supplied less than three per cent of Canada's energy needs, compared with 15 per cent in the United States.

Alberta's substantial gas reserves, however, were growing, and men with vision foresaw in them a potential source of energy far beyond the province's own needs.

TransCanada's sponsors proposed construction of what would then be the world's longest pipeline, along an all-Canadian route from Alberta to Montreal, across some of the roughest terrain that pipeline builders had ever faced. It would make natural gas available for the first time to the major portion of Canada's population and industry.

From the time the Company was incorporated, it took seven and a half years to obtain necessary government approvals, secure financing, and construct the pipeline.

The first deliveries of natural gas to eastern Canada began on October 27, 1958. It cost $505 million to build the pipeline, including $130 million for the section across northern Ontario which was financed and owned by the Government of Canada, and leased to TransCanada. Later, TransCanada purchased this section from the Government.

The support provided to the Canadian manufacturing and engineering industries by TransCanada's policy of buying Canadian goods and services has made it possible to increase this domestic contribution to pipeline construction and operation from 25 per cent in the 1950s to almost 90 per cent today.

The number of Canadian gas customers has increased from less than one quarter of a million, at the time TransCanada was incorporated, to 2.5 million today, of which 1.7 million are supplied with gas from the TransCanada line. Natural gas is now supplied to the homes of eight million Canadians, five million of them served by TransCanada. The largest volumes of gas, however, are purchased by industrial

customers, which account for 56 per cent of the gas sold by TransCanada. Residential and commercial customers each account for about 22 per cent.

TransCanada met the challenge of nearly three decades ago. The results contributed to increasing Canadian prosperity and well-being, meeting Canada's energy needs, increasing employment, generating government revenues, rewarding Canadian savings, and earning billions of dollars in export revenues.

Today, TransCanada and the nation face a new but similar challenge, as demanding and important as in the past. The challenge is again to increase Canada's energy self-reliance and strengthen the economy, to connect new sources of gas supply, to increase gas use in market areas now served and extend gas service to new areas of Canada, and lastly to sustain and increase exports of gas surplus to Canadian requirements in controlled fashion.

Measures by TransCanada to meet this challenge include:

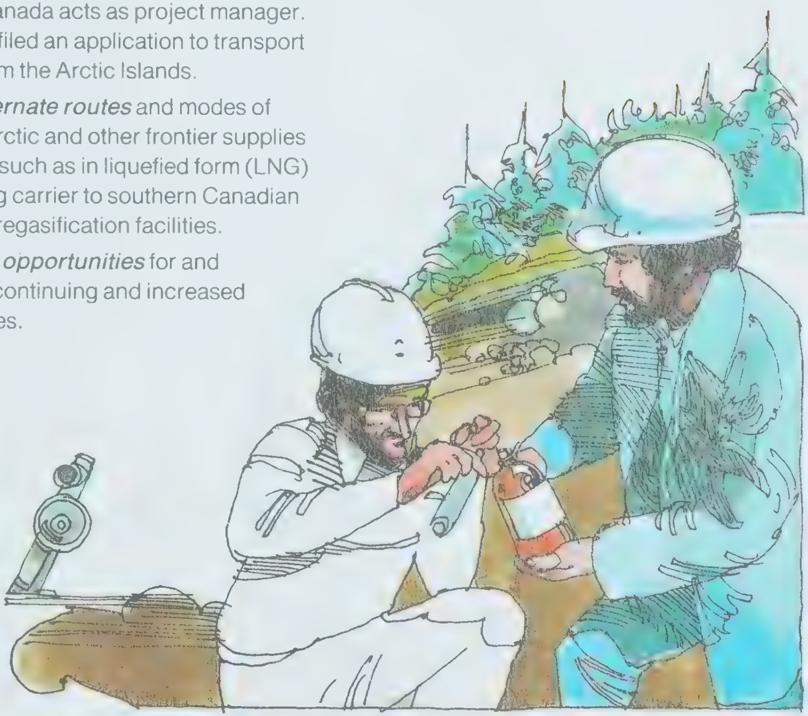
An application to the National Energy Board for a $1.5 billion extension of the Company's system from Montreal eastward in the province of Quebec and to the provinces of New Brunswick and Nova Scotia, preceded by

Development of the markets of all four Atlantic provinces for domestic gaseous energy by means of a propane distribution system.

Participation in the Polar Gas Project, for which TransCanada acts as project manager. Polar Gas has filed an application to transport natural gas from the Arctic Islands.

Studies of alternate routes and modes of transport for Arctic and other frontier supplies of natural gas, such as in liquefied form (LNG) by ice-breaking carrier to southern Canadian reception and regasification facilities.

Studies of the opportunities for and advisability of continuing and increased gas export sales.



TransCanada PipeLines has a long established policy to protect and enhance environmental values along the pipeline right-of-way. Here a water sample is tested.

royalty and lease payments. In 1977, these payments amounted to more than $3.5 billion. Revenues received by the Alberta Government from gas purchased by TransCanada, and from by-products recovered from this gas, exceed half a billion dollars a year.

TransCanada PipeLines offers a good example of how the private enterprise system works to provide energy and other essential goods and services to Canadians.

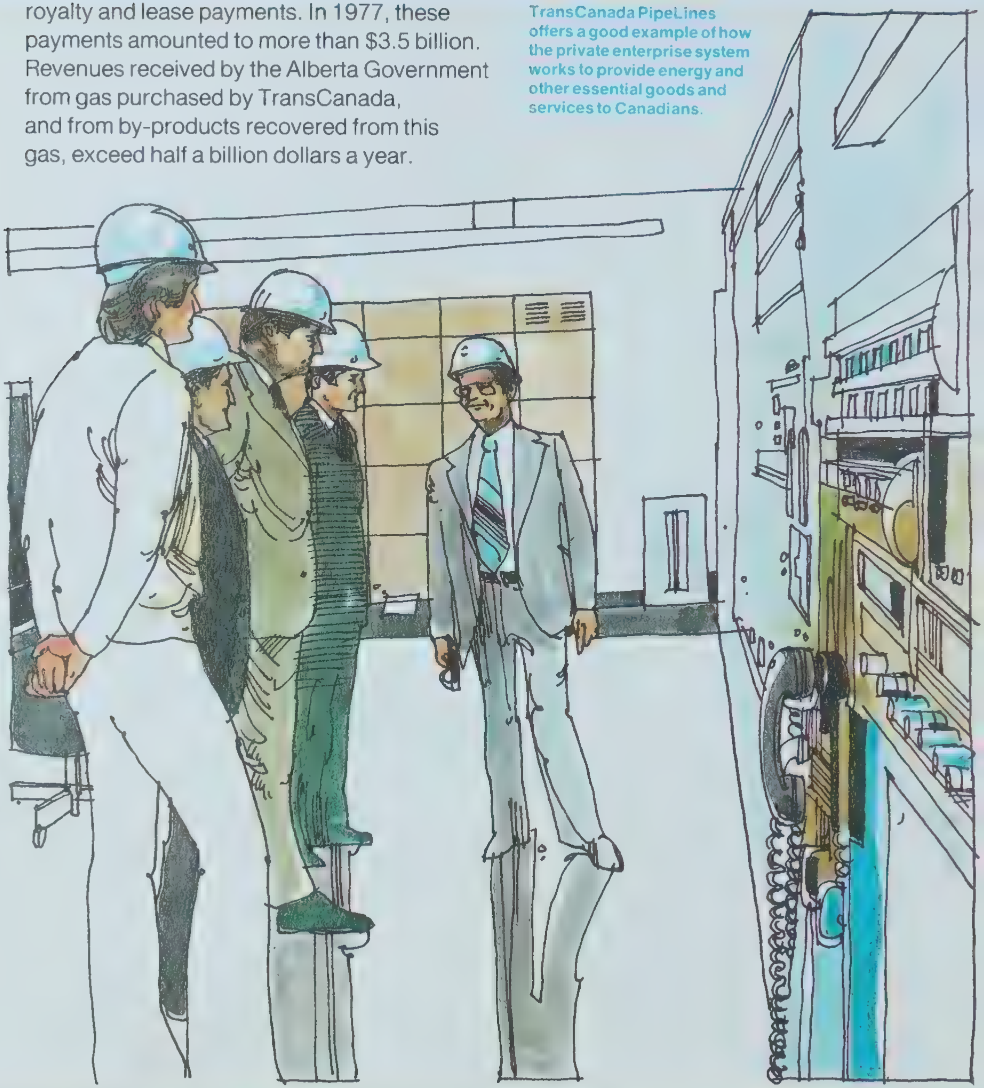
TransCanada's Role in Public Revenues

The oil and gas industry is a large source of government revenue, amounting to billions of dollars every year. TransCanada plays an important role in the generation of these public sector revenues.

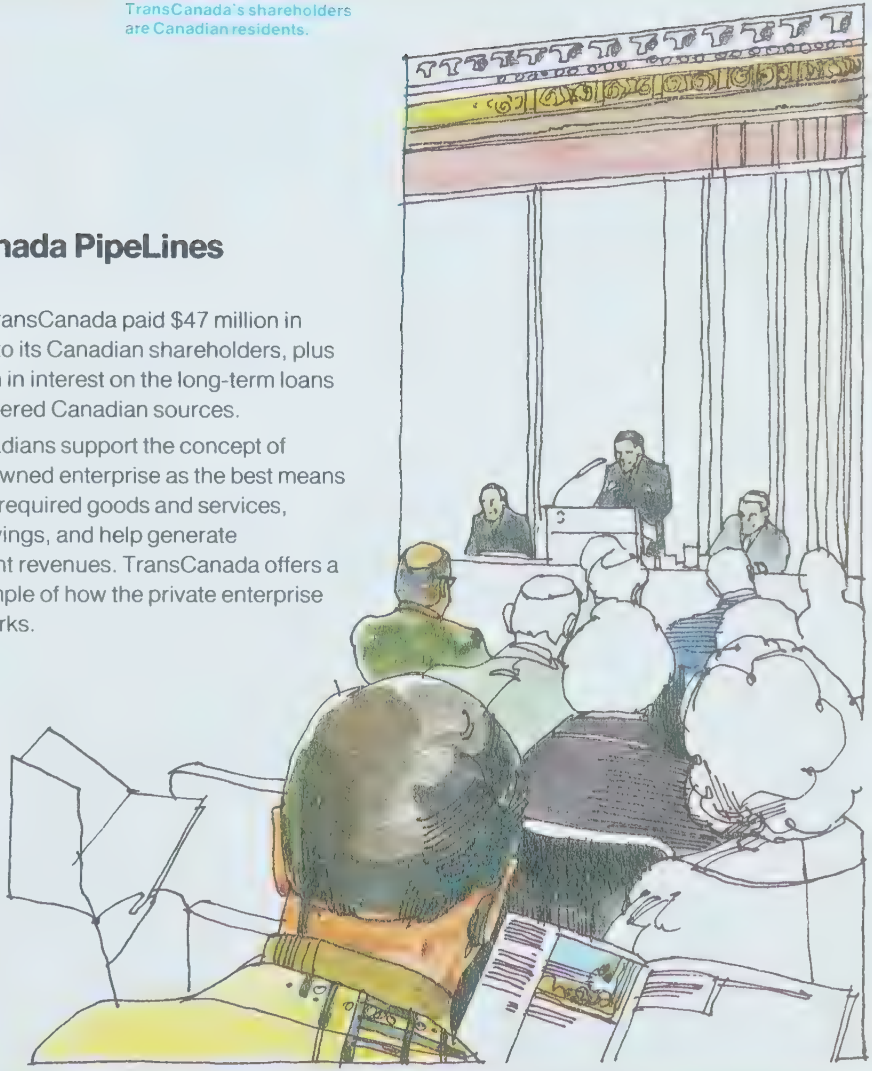
Property taxes paid by the Company are an important source of revenue for many Canadian municipalities. In the provinces of Alberta, Saskatchewan, Manitoba, Ontario and Quebec, the pipeline passes through more than 250 individual taxing authorities. Property taxes in 1978 amounted to more than $11 million. Including other provincial taxes, payments to municipal and provincial governments amounted to nearly $14 million.

In many of the remote areas of Saskatchewan, Manitoba and northern Ontario, TransCanada represents nearly the full industrial assessment of some local taxing authorities. In some cases, TransCanada pays from 20 to as much as 90 per cent of the tax revenue required to support the local government or administration.

Western provincial governments, as owners of most of the oil and gas resources, collect large revenues in the form of production



More than 98 per cent of TransCanada's shareholders are Canadian residents.



Canadian Savings at Work with TransCanada PipeLines

The savings of millions of individual Canadians are invested in TransCanada PipeLines.

Because it is a public utility, the returns on the savings invested in TransCanada are regulated by the National Energy Board, an agency of the Government of Canada.

A total of 32,885 Canadian shareholders owned TransCanada in 1978: 26,100 owned 98 per cent of the Company's issued common shares,while 6,768 owned 99 per cent of the issued preferred shares.

Not all these Canadian shareholders are individuals. Some are Canadian-owned corporations; other are Canadian investment organizations, such as insurance companies, pension funds and mutual investment funds. Other Canadian savings constitute a portion of the funds which TransCanada has borrowed. By these means, the number of Canadians whose savings ultimately constitute the capital employed by TransCanada is many times the number of registered shareholders.

In 1978, TransCanada paid $47 million in dividends to its Canadian shareholders, plus $53 million in interest on the long-term loans from registered Canadian sources.

Most Canadians support the concept of privately-owned enterprise as the best means to provide required goods and services, reward savings, and help generate government revenues. TransCanada offers a good example of how the private enterprise system works.

In 1978 TransCanada's gas export sales amounted to $634 million. Natural gas supplied to Canadian users by TransCanada was equivalent in value to more than $1.5 billion worth of foreign oil.

Natural Gas and the Balance of Trade

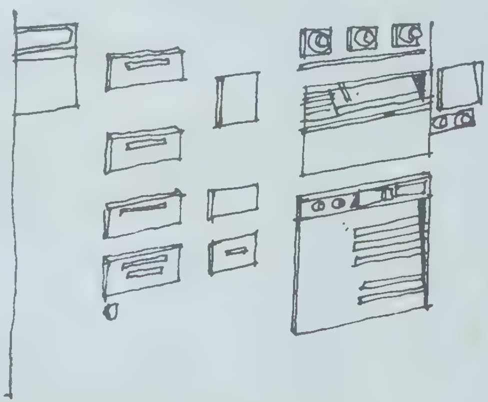
Canadians spend more for foreign goods and services than we earn from other countries.

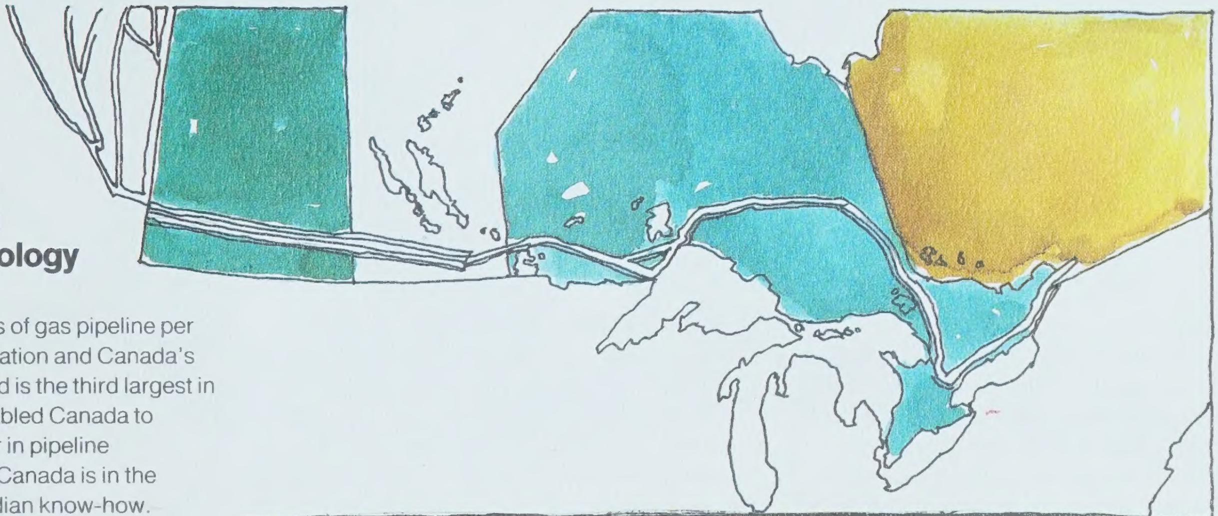
The deficit has been increasing rapidly. In the five years, 1971-75, we spent an average $1.4 billion more per year for foreign goods and services and in financial costs than we earned from other countries. By 1978 the deficit had increased to $5 billion, and in 1979 is expected to approach $6 billion.

This deficit occurs at a time when Canada is still, on balance, self-sufficient in energy, as the cost of oil imports is offset by equivalent revenues from natural gas exports. But the cost of imported oil, which amounted to some $2 billion in 1978, may double by the mid-1980s. At the same time, most of the existing gas export licenses expire in the 1980s, so that this source of export revenue will decline, unless new export volumes are approved.

Because of this net deficit, the value of the Canadian dollar declined over two years by some 20 per cent in relation to the U.S. dollar, and declined much more in relation to other currencies. The effects have been to increase the rate of inflation, erode the real earnings and savings of Canadians, and increase interest rates to record levels.

TransCanada's operations are an important factor in redressing this imbalance.



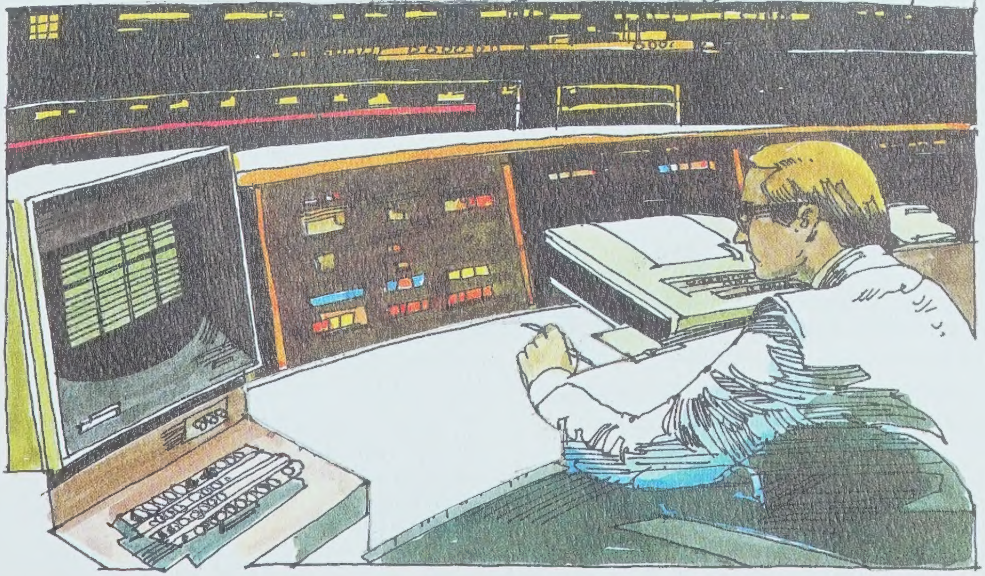


In the Forefront of World Technology

Canada has more miles of gas pipeline per capita than any other nation and Canada's natural gas pipeline grid is the third largest in the world. This has enabled Canada to become a world-leader in pipeline technology, and TransCanada is in the vanguard of this Canadian know-how.

The Company's recognized expertise is marketed in both Canada and abroad through a wholly-owned subsidiary, International PipeLine Engineering Limited. IPEL offers services in pipeline design, construction supervision, testing, quality control, personnel training, computer applications, and other special services.

The TransCanada system employs one of the most advanced computer systems in the control of pipeline operations. In 1965, the Company installed an on-line computer at its



The Gas Control Centre in Toronto employs an on-line computer for the remote-controlled, high efficiency operation of the pipeline system.

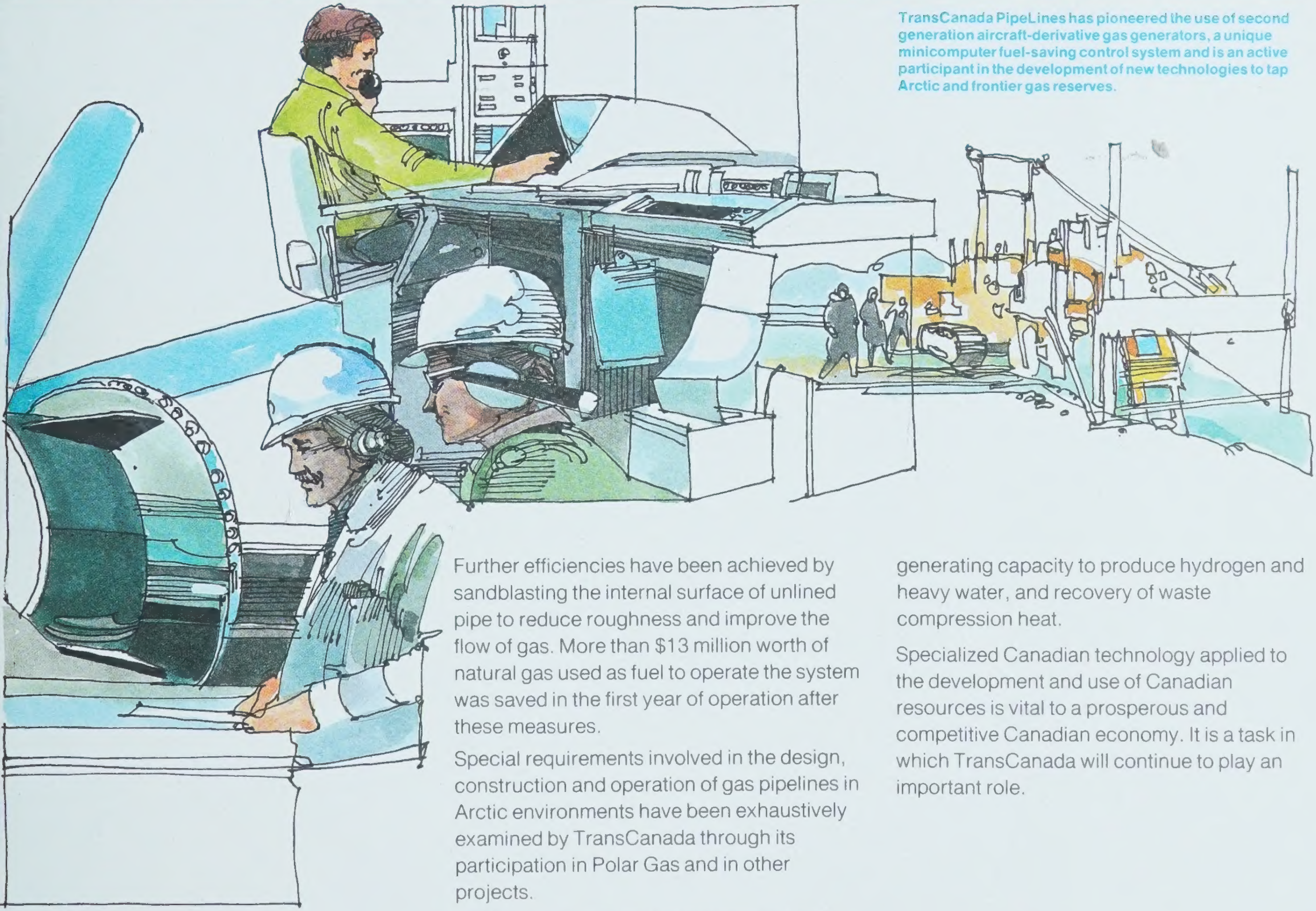
Canadian pipeline expertise is made available to the world gas industry through International PipeLine Engineering Ltd. (IPEL), a wholly owned subsidiary of TransCanada PipeLines.

gas control centre in Toronto. With the computer linked by telemetry to the system's 48 compressor stations, the gas control centre provides remote-control operation of the 9 300 km (5,800 miles) of pipeline, continuously monitoring changes in gas receipts, deliveries, demand, and available compression horsepower, to achieve maximum transmission and delivery efficiency.

In 1975, TransCanada programmed and installed a unique minicomputer control system at its major compression stations. The closed loop minicomputer system used at multi-unit compressor stations selects the optimum combination of units to meet changing requirements. The improved efficiency has resulted in fuel savings of up to 15 per cent over manual station control.

TransCanada was the first pipeline company in North America to introduce portable turbine-powered compressor units. When permanent compressor units are shut down for periodic overhaul and maintenance, mobile units can be moved by highway to the station, tied into the system, and used to maintain full horsepower.

A lightweight, portable electronic probe, known in the industry as a "pig", has been developed by TransCanada, and successfully used in a testing program of its older sections of pipe. Propelled through the buried pipe, the pig can detect and record pipe flaws and damages, so that the sections of pipe can be replaced or repaired before a failure may occur. In addition to guarding against possible breaks, the Company's testing and up-grading of its original pipeline has permitted it to operate the system at more efficient pressures. Other Canadian pipelines have used the TransCanada electronic pig for similar pipeline testing, and further development of the device is continuing. In 1978 TransCanada completed a retesting program of the entire original pipeline system.



TransCanada PipeLines has pioneered the use of second generation aircraft-derivative gas generators, a unique minicomputer fuel-saving control system and is an active participant in the development of new technologies to tap Arctic and frontier gas reserves.

Further efficiencies have been achieved by sandblasting the internal surface of unlined pipe to reduce roughness and improve the flow of gas. More than $13 million worth of natural gas used as fuel to operate the system was saved in the first year of operation after these measures.

Special requirements involved in the design, construction and operation of gas pipelines in Arctic environments have been exhaustively examined by TransCanada through its participation in Polar Gas and in other projects.

Other current research programs include a new method of pipe-welding by the use of explosives, utilization of idle electric power generating capacity to produce hydrogen and heavy water, and recovery of waste compression heat.

Specialized Canadian technology applied to the development and use of Canadian resources is vital to a prosperous and competitive Canadian economy. It is a task in which TransCanada will continue to play an important role.

TransCanada PipeLines

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